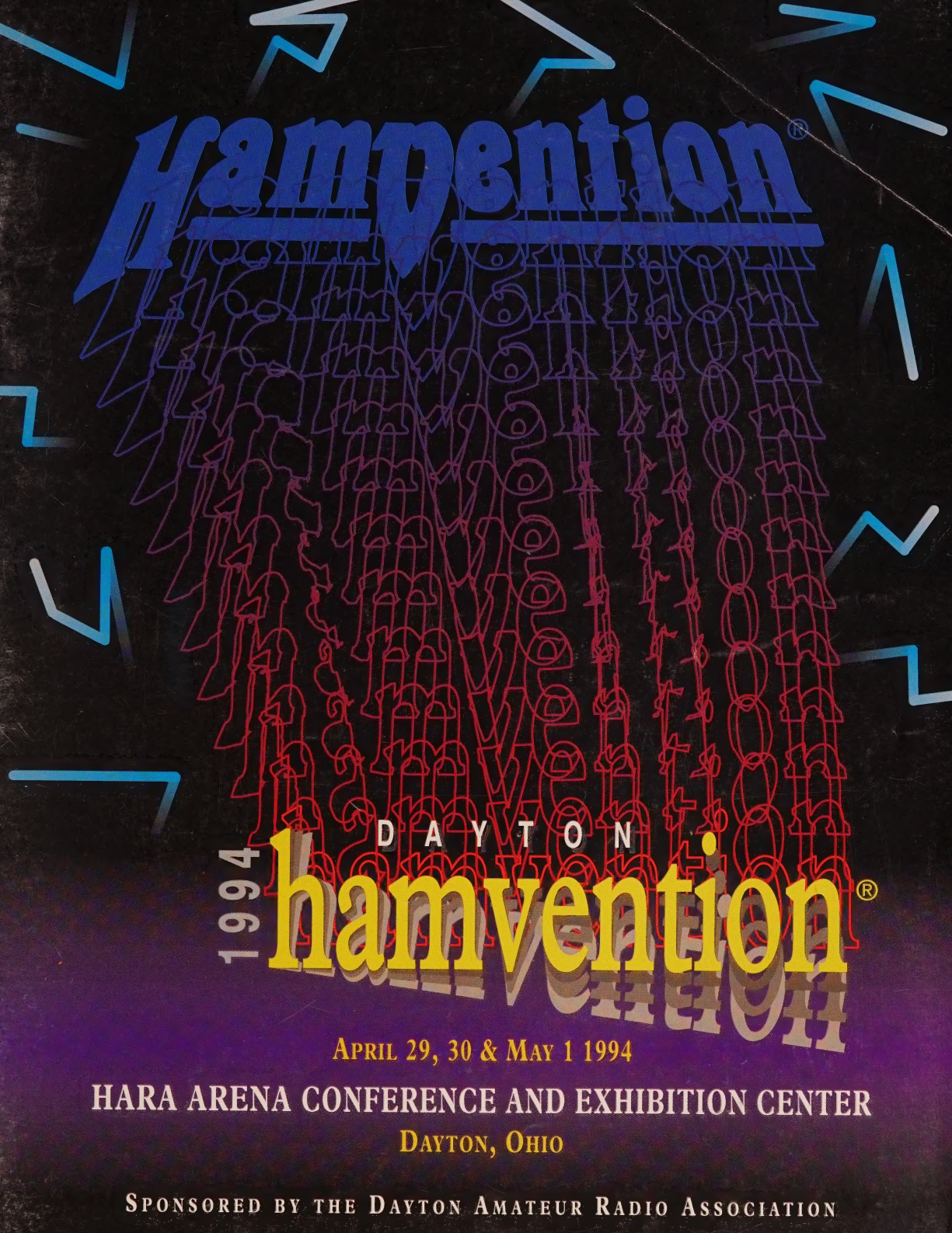




Hamvention®

1994 DAYTON
hamvention®

APRIL 29, 30 & MAY 1 1994

HARA ARENA CONFERENCE AND EXHIBITION CENTER
DAYTON, OHIO

SPONSORED BY THE DAYTON AMATEUR RADIO ASSOCIATION



TEAM ICOM '94

An "All-Star" Line Up!



This year's "All-Star"

Line Up includes (L to R):

Top row: IC-2340H, IC-Δ100H, IC-2700H

Middle row: IC-2GXTA, IC-820H, IC-T21A, IC-281H

Bottom row: IC-737A, IC-736

(Not pictured: IC-T21A UHF handheld and IC-818H* UHF mobile)

Get Your Mitts on an ICOM "All-Star" this Season!

- IC-2340H** 144/440 MHz Mobile
Featuring Independent Controls
- IC-Δ100H** Triple Band Mobile with Remote Head
- IC-2700H** 144/440 MHz Mobile with Remote Head
- IC-2GXTA** VHF Handheld with Channel Operation, DTMF Redial and opt. 7 W Output Power
- IC-820H** 144/440 MHz All Mode Base Station
- IC-T21A** Small VHF Handheld with up to 6 Hours Operating Time and opt. 6 W Power
- IC-281H** 2 M Mobile w/440 MHz RX and 9600 bps
- IC-737A** HF Transceiver with VOX, 100% Duty Cycle, New D.D.S., Quick Split and more!
- IC-736** 100 W HF Transceiver (even @ 6 Meters!)

*This device has not been approved by the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained.

Play ICOM's "All-Star" Sweepstakes!

(One of each new radio will be awarded for a total of 11 prizes)

1. Pick up your entry form at any authorized ICOM Dealer or Ham Show where ICOM exhibits.
2. Enter the random drawing as many times as you like! List your favorite feature of any of our new radios and include your name, address and call.
3. Mail-in entries permitted if your nearest dealer is over 100 miles away. Mail your entry to that dealer.
4. Each entry form must be initialed by a dealer salesperson or ICOM employee to be valid.
5. Your last day to enter is June 30, 1994.
6. Drawing will be held at 12:00 Noon on Friday, July 15, 1994 at ICOM America, Inc. Corporate Hdqtrs.

* ICOM employees, or employees of ICOM dealers are not eligible.

The ICOM tradition of high quality, advanced features and intelligent design continues with this year's "All-Star" Line Up. With over 40 years experience in the Amateur Radio Industry, we know what it takes to build a winning team. This year we have selected 11 of the best players in the field. We've loaded the bases with the newest in technology from handhelds to mobiles to base stations. We welcome you to step up to bat and bring them on home.

ICOM America, Inc. Corporate Headquarters
2380-116th Ave. NE, Bellevue, WA 98004
Technical Support (206) 454-7619

© 1994 ICOM America, Inc. The ICOM logo is a registered trademark of ICOM, Inc. All stated specifications are subject to change without notice or obligation. All ICOM radios significantly exceed FCC regulations limiting spurious emissions. Day3947

Want to Know More? Call Our Brochure
Hotline for FREE Product Literature:
(206) 450-6088

Experience the Quality

ICOM®

FT-2500M/FT-7400H 2m/70cm Mobiles

Specifications

- Frequency Coverage:**
 - FT-2500M
 - RX: 140-174 MHz
 - TX: 144-148 MHz
 - FT-7400H
 - RX/TX: 430-450 MHz
- Rugged Military Spec Design
- Advanced Track Tuning (ATT)
- Selectable Alpha-Numeric Display
- Largest Display Available
- Power Output:**
 - FT-2500M 50/25/5 Watts
 - FT-7400H 35/20/5 Watts
- Flip Up Front Control Panel Hides Seldom Used Buttons
- Backlit DTMF Mic
- 31 Memory Channels
- CTCSS Encode Built-in
- Automatic Power Off (APO)*
- Time-Out Timer (TOT)*
- Manual* or Automatic Backlighting Adjustment
- Accessories:**
 - FTS-17A CTCSS Decode Unit
 - FRG-6 DTMF Paging Unit
 - SP-4 External Speaker
 - FP-700 Power Supply

*FT-2500M

"No other mobile has a Military spec rating. This radio can really take it!"

"Backlit DTMF Mic, too. Only Yaesu radios have this."

"3-stage advanced track tuning really reduces intermod. Its great!"

"Yaesu did it again."



FREE Yaesu Cap
at Yaesu Booth
with your
Dayton Hamvention
Proof of Admission

Performance beyond the call of duty.

Just when you thought you had the most formidable mobile built, we made the FT-2500M. It's the next evolution of powerful, rugged mobile radios.

The FT-2500M, based on the acceptance of the popular FT-2400H, takes its durable quality, features, and performance then goes one better! The FT-2500M has a new easy-to-operate front panel design with rubber coated knobs and large amber display, and the Yaesu exclusive 3-Stage Advance Track Tuning feature which reduces intermodulation and front-end overload. With its superior technology, the FT-2500M is as close as you can get to commercial grade performance in amateur frequencies.

The FT-2500M is the only mobile with a Military spec rating; the only mobile radio with the most often used

controls on the front and those you "set and forget" neatly hidden; and the only mobile radio with a backlit DTMF mic. With its extra large heat sink and one-piece die-cast chassis, the tough FT-2500M is unlike any other mobile in its class.

So test the mettle of your mobile, if it doesn't measure up to the endurance standards set by the U.S. Military, you need the FT-2500M. Designed for flawless performance in rough and rugged situations, the FT-2500M is really formidable – just what you'd expect from Yaesu. See it at your dealer today!

YAESU
Performance without compromise.SM

FT-2200/7200

Just 5.5" x 1.6" x 6.5" D, the FT-2200/7200 radios are designed to fit into today's more compact cars with ease.

SPECIFICATIONS • Frequency Coverage: FT-2200 RX: 110-180 MHz, TX: 144-148 MHz. FT-7200 RX/TX: 430-450 MHz. • Wide Receiver Coverage: 110-180 MHz • AM "Aircraft" Receive: 110-139 MHz • Built-in DTMF Paging/Coded Squelch • Selectable Channel Only Display • 10 Memory DTMF Auto Dialer • Backlit DTMF Mic • Power Output 50/25/5 Watts (FT-7200 35 Watts) • 50 Memory Channels • Remote Operation w/ Optional MW-2 • CTCSS Encode Built-in • Optional Digital Voice Storage System. Accessories: See your authorized Yaesu dealer.



Spring Savings are Blooming at Kenwood

Sale Ends
May 7th!



TM-241A SAVE \$30.00

Wide band receiver coverage
• CTCSS encode built-in • Three power settings: 5, 10, and 50W
• 20 full-function memory channels store everything you need
• Multiple scanning functions



TS-50S SAVE \$50.00

An exceptional compact, all-band HF transceiver, with 500kHz to 30MHz receiver • 100 watts • DDS with "fuzzy logic" control • Kenwood's Advanced Intercept Point (AIP) ensures top performance with reduced noise floor

TH-22AT/42AT SAVE \$20.00

3-watt output from MOS-FET power module and supplied 6-volt battery (TH-22AT: approx. 3 watts, TH-42AT: approx 2.5 watts), and 5-watt output with optional PB-34 • Easy 12-volt operation with PG-2W or PG-3H cable
• Compact design: 2-3/16 x 4-5/8 x 1 in. • Built-in DTMF keypad with monitor



TS-950SDX SAVE \$100.00

An industry first! 50-volt, MOS-FET final amplifier and DSP for superior linearity. 150 watts output • All-band HF transceiver with general coverage receiver • Switchable AGC, selectable IF filters with memory, dual-mode noise blankers, IF notch filter. CW reverse mode, CW pitch, SSB slope tuning, IF and AF variable bandwidth tuning • Built-in CW memory keyer (DRU-2 voice keyer optional)



TM-742A/942A SAVE \$40.00

TM-742A: 50W output (144 MHz), 35W (440 MHz); TM-942A: 50W (144 MHz), 10W (1200 MHz) • 101 memory channels & memory bank system • Independent SQL & VOL controls for each band

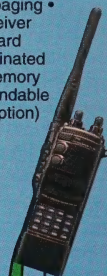


TS-450S/SAT SAVE \$50.00

All-band HF transceiver with general coverage receiver, with 100 watts • Wonderfully easy to use, yet high-performance package • Filter options for superb receiver performance

TH-78A SAVE \$30.00

Full duplex cross-band operation • CTCSS encode/decode built-in • Alpha numeric display and message paging • Wide band receiver • Sliding keyboard cover and illuminated keypad • 52 memory channels, expandable to 250 (ME-1 option)



CUT YOUR OWN DEAL !!

To our customers: PRESENT THE COMPLETED COUPON AT THE TIME OF PURCHASE TO YOUR AUTHORIZED KENWOOD AMATEUR RADIO DEALER FOR YOUR DISCOUNT. This coupon may be used only for the Kenwood models listed here, for the appropriate discount indicated. This coupon is not good for cash. Offer good only at authorized dealers.

To authorized Kenwood dealers: indicate the radio purchased and discount amount. Send this coupon, along with the copy of sales receipt, to Kenwood Communications Corporation. Attention: Spring Sale

NAME _____
ADDRESS _____
CITY, STATE, ZIP _____
PHONE _____
CALL SIGN _____

Please check model purchased & discount

TH-22AT/42AT	\$20.00 off
TH-78A	\$30.00 off
TM-241A	\$30.00 off
TM-742A/942A	\$40.00 off
TS-50S	\$50.00 off
TS-450S/SAT*	\$50.00 off
TS-950SDX	\$100.00 off

*With or without tuner

Coupon offer valid in USA only; void where prohibited. This coupon has no cash value. COUPON MUST BE FILLED OUT BY CUSTOMER AND PRESENTED TO AN AUTHORIZED DEALER TO BE VALID. Not valid with any other offers or discounts. Coupon offer valid March 20, 1994 through May 7, 1994 only.

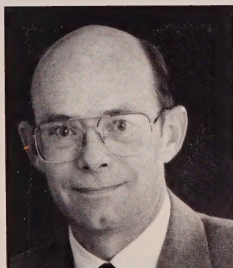
REDEEM WITH AUTHORIZED DEALER

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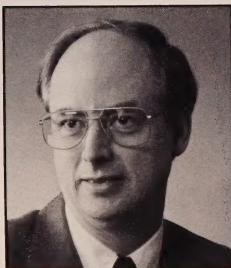
DAYTON[®]
hamvention

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Chairman's Welcome



Dave Grubb, KC8CF
General Chairman



Ken Allen, KB8KE
Assistant General
Chairman

WELCOME!

On behalf of the Dayton Amateur Radio Association and the Dayton Hamvention Committee, I am pleased to welcome you to the 1994 Dayton Hamvention.

Since before the doors closed on Sunday afternoon at last year's show, the Hamvention Committee has been hard at work to assemble another great program. As always, our goal is to provide the very best in equipment displays, an outstanding Flea Market, stimulating forums and social events. We hope that everyone visiting the Hamvention finds "just what they're looking for."

Again, welcome to our show. Have a great time, renew old friendships, make new ones and have a safe trip home. See you in '95.

73,

Dave

Dave Grubb, KC8CF
General Chairman

DEMAND THE BEST



DR-600T (144 MHz/440 MHz)

The outstanding abilities of the DR-600T set it apart from every other radio. Features like Wide Frequency Coverage, Excellent Intermod Rejection, Direct Frequency Entry from the microphone, Three Output Power Selections, Autopatch Memories, and 6 Scanning Modes make the DR-600T the radio of choice for demanding users. The Remote Mount Head allows for custom installation in most any vehicle, and also helps to deter theft.

This road-ready rig can also be remote controlled by any radio that transmits DTMF tones. This remarkable feature allows the DR-600T to act as a full-featured Cross-Band Repeater. For added control, a security code can be programmed that will allow control only by the control operator (you).

DJ-G1T

The DJ-G1T 2m HI from ALINCO scores another "First" for Amateur Radio technology. Our new "Channel Scope" feature opens new doors for Ham operators. Now it is possible to visually monitor up to 7 memory channels at once with just a glance at the display.

Also, the Channel Scope feature can be used to show band activity in the frequency domain, much like a Digital Spectrum Analyzer. Hunting for band activity just got easier.

Other outstanding features include 440 Receive, 80 Memory channels, AM Aircraft receive, 5 Autodialer channels, DSQ for private paging, Cross-Band Semi-Duplex, 6 Scan Modes, and Odd Splits on all Memory Channels.

Better Products, Better Service.
See for yourself why people are
coming to ALINCO.



438 Amapola Ave., #130,
Torrance, CA 90501
Phone: (310) 618-8616
Fax: (310) 618-8758

— Other Great Products from ALINCO —



SEE US IN BOOTHS 628, 629, 635, 636. WE ARE A HAMVENTION PRIZE DONOR.

Exhibit Hours ...

Exhibits open and prizes on display.

Friday	Noon - 6:00 p.m.
Saturday	8:00 a.m. - 5:00 p.m.
Sunday	8:00 a.m. - 2:00 p.m.

Flea Market Hours ...

Friday	8:00 a.m. - 6:00 p.m.
Saturday	6:00 a.m. - 5:00 p.m.
Sunday	6:00 a.m. - 4:00 p.m.

Forum Hours ...

Friday	1:00 p.m. - 4:45 p.m.
Saturday	8:30 a.m. - 5:00 p.m.
Sunday	9:00 a.m. - 1:00 p.m.

Prize Drawings ...

Drawing for major prizes: 2:00 p.m. Sunday

All areas except Prize Drawing Area (Hara Arena) will be closed and secured at 2:00 p.m. Sunday. Hara Arena will be closed after the last prize is drawn.

Message Center ...

Leave a message for your friends by entering their call sign and message at the DARA Booth #1 (next to the Prize Booth) (see map page 82). Prize monitors throughout the arena complex and at the DARA Booth will periodically list "message holding", by call sign.

Talk-in Frequencies ...

For directions and assistance in the Dayton Area during your visit to Hamvention, contact "Talk-In" on the DARA Repeater 146.94 (-), alternate 146.91(-).

Dayton Hams also monitor 223.94 (-), 442.1 (+).

General Hamvention information is also available on 530 A M.

Baggage Check ...

Room near Hamvention office. \$1.00 per claim check. All items must be reclaimed by closing time each day. Time extended to 4:00 p.m. on Sunday. No overnight storage is permitted.

Lost and Found ...

Please take items to the Hamvention Office. We have keys and glasses from 1993, if you lost these items please claim them at the Hamvention Office. See map on page 82.

Special Event Station ...

Special Event Station W8BI/8 will again operate from the Hamvention Flea Market. The Station will be open to the public during Flea Market hours. Those who upgrade at a Hamvention testing session are especially invited to stop by and use their new privileges.

W8BI/8 will usually be operating in the general and novice phone and CW portions, as band conditions dictate, to allow as many as possible to be with us in spirit.

W8BI/8 QSLs Hams and SWLs 100%. To QSL, send a business-size stamped, self-addressed envelope to W8BI/8, P. O. Box 44, Dayton, Ohio 45401, or QSL via the Bureau.

Hamvention Office ...

The Hamvention office is located just inside and to the right of the main entrance of the Conference & Silver Arena (see map on page 82). Services include: general information, lost and found, advance registration pick-up, and wheelchairs.

Air Freight Service ...

Delta Air Freight Cargo is offering a 40% discount off the published rate, with a \$30 minimum, to over 150 cities. Delta will have a representative at the Hamvention to handle your shipping needs and will provide free truck service to the airport. Booths 204 and 216. See map on page 82.

Hours:	Friday	12:00 a.m. - 6:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	9:00 a.m. - 2:00 p.m.

License Exams ...

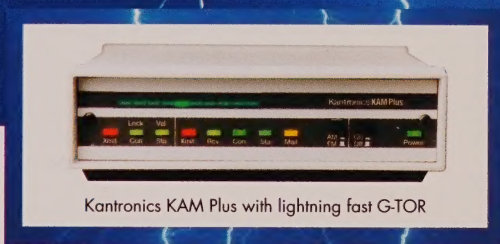
License exams for all pre-registered candidates will begin at 9:00 a.m. at Meadowdale High School. Shuttle bus service is provided from Hara Arena to the Test site.



A special thanks to **Buckmaster**
for the use of their HamCall
CD which was used to verify
the calls in this program.

SEE US IN BOOTHS 41-44.

Pactor is fast. G-TOR is more along these lines.



The KAM Plus strikes again. It's now available with lightning fast G-TOR, a Kantronics innovation. More than twice the speed of Pactor in most band conditions, this error-correcting mode is the fastest HF mode available in a stand-alone TNC.

In addition to G-TOR, the KAM Plus operates the other popular modes and is capable of operating an

HF mode and VHF packet at the same time. The KAM Plus also features more than 100K of personal mailbox space. And like most Kantronics products, the KAM Plus is small, portable and equipped with a NEWUSER command set and on-line helps.

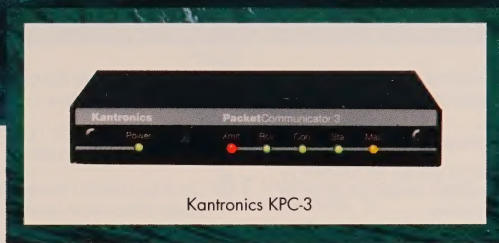
KAM Plus with G-TOR. Together, the two are taking HF digital communications by storm.

Kantronics

For more information, contact your authorized Kantronics dealer or Kantronics at 1202 E. 23rd St., Lawrence, KS 66046-5006 913-842-7745 FAX 913-842-2021.

SEE US IN BOOTHS 41-44.

Imagine this much power unleashed by a 9-volt battery. That's the KPC-3.



Kantronics KPC-3

It's one of the smallest TNCs you can buy. One of the least expensive. It uses the least power. And it's extremely user-friendly. Yet it offers enough performance to satisfy even advanced users. The KPC-3 has more than 20K in personal mailbox space that

is inexpensively expandable to 100K; it runs on a 9-volt battery, so it's portable; and it's very affordable. So if you've been wondering why packet beginners and veterans alike choose the KPC-3, now you know. Maybe you should catch the same wave.

Kantronics



JST-245

160-10 Meters PLUS 6 Meter Transceiver



Fifteen reasons why your next HF transceiver should be a JST-245...

- 1 **All-Mode Operation** (SSB,CW,AM,AFSK,FM) on all HF amateur bands and 6 meters. JST-145, same as JST-245 but without 6 meters and built-in antenna tuner.
★ JST-145 COMING SOON ★
- 2 **MOSFET POWER AMPLIFIER** • Final PA utilizes RF MOSFETs to achieve low distortion and high durability. Rated output is 10 to 150 watts on all bands including 6 meters.
- 3 **AUTOMATIC ANTENNA TUNER** • Auto tuner included as standard equipment. Tuner settings are automatically stored in memory for fast QSY.
- 4 **MULTIPLE ANTENNA SELECTION** • Three antenna connections are user selectable from front panel. Antenna selection can be stored in memory.
- 5 **GENERAL COVERAGE RECEIVER** • 100 kHz-30 MHz, plus 48-54 MHz receiver. Electronically tuned front-end filtering, quad-FET mixer and quadruple conversion system (triple conversion for FM) results in excellent dynamic range (>100dB) and 3rd order ICP of +20dBm.
- 6 **IF BANDWIDTH FLEXIBILITY** • Standard 2.4 kHz filter can be narrowed continuously to 800 Hz with variable Bandwidth Control (BWC). Narrow SSB and CW filters for 2nd and 3rd IF optional.
- 7 **QRM SUPPRESSION** • Other interference rejection features include Passband Shift (PBS), dual noise blanker, 3-step RF attenuation, IF notch filter, selectable AGC and all-mode squelch.
- 8 **NOTCH TRACKING** • Once tuned, the IF notch filter will track the offending heterodyne (± 10 KHz) if the VFO frequency is changed.
- 9 **DDS PHASE LOCK LOOP SYSTEM** • A single-crystal Direct Digital Synthesis system is utilized for very low phase noise.
- 10 **CW FEATURES** • Full break-in operation, variable CW pitch, built in electronic keyer up to 60 wpm.
- 11 **DUAL VFOs** • Two separate VFOs for split-frequency operation. Memory registers store most recent VFO frequency, mode, bandwidth and other important parameters for each band.
- 12 **200 MEMORIES** • Memory capacity of 200 channels, each of which store frequency, mode, AGC and bandwidth.
- 13 **COMPUTER INTERFACE** • Built-in RS-232C interface for advanced computer applications.
- 14 **ERGONOMIC LAYOUT** • Front panel features easy to read color LCD display and thoughtful placement of controls for ease of operation.
- 15 **HEAVY-DUTY POWER SUPPLY** • Built-in switching power supply with Power Factor Correction (PFC) and "silent" cooling system designed for continuous transmission at maximum output.

"This device has not been approved by the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained."



Japan Radio Co., Ltd.

430 Park Ave., 2nd Floor New York, NY 10022

Phone: (212) 355-1180 Fax: (212) 319-5227

Registration and Ticket Sales

DAYTON
hamvention®

General Admission ...

Tickets (valid all 3 days) \$14.00

Age 12 or younger, FREE

A general admission ticket is required to attend the Alternate Activities. This ticket is also available at Meadowdale High School.

Grand Banquet ...

Tickets \$24.00 (At Hara Arena). Tickets will be sold until 12:00 (noon) Saturday at Hara Arena. If banquet tickets are still available, they may be purchased at the banquet door.

Ticket requests RECEIVED by April 8 (Canada - April 1) are sent by return mail. Orders received AFTER the deadlines are held for pick-up in the Hamvention office.

Admission Tickets May Be Purchased ...

Thursday	Starting at noon
Friday	Starting at 7:00 a.m.
Saturday	Starting at 6:00 a.m.
Sunday	Starting at 6:00 a.m.

Alternate Activities Luncheon ...

(Includes door prize drawing)

Luncheon	Saturday	\$8.50
	Sunday	\$8.00

LUNCHEON TICKETS ARE SOLD ONLY AT:

Hara Arena (Room 3)

Friday 2:00 p.m. to 3:00 p.m.

Meadowdale High School

Saturday 8:00 a.m. to 12:00 p.m. (noon)

Sunday 8:00 a.m. to 12:00 p.m. (noon)

Flea Market ...

A general admission ticket is required to enter the Flea Market. Tickets to exhibit and sell at the Flea Market are sold in ADVANCE only! For 1995 Flea Market permits, watch for our ad in various amateur radio magazines. See pages 5 and 58 for more Flea Market information.

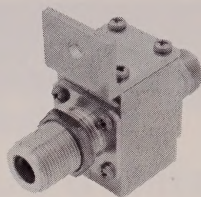
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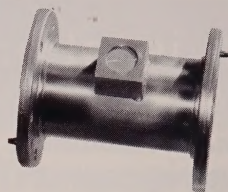
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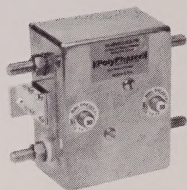
GROUNDING AND LIGHTNING SOLUTIONS



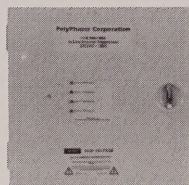
COAX TO 6GHz



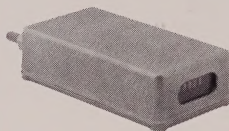
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TO 80 KW



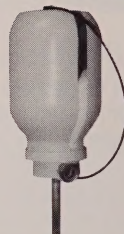
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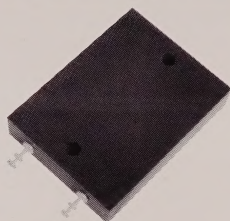
STRIKE COUNTERS
TOWER/POWER/PHONE



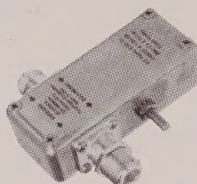
CHEMICAL
GROUND SYSTEMS



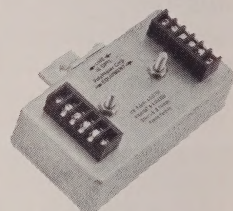
BREAKDOWN
TESTERS



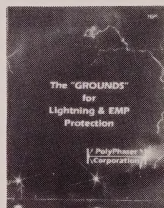
HIGH CURRENT/ENERGY
LOW CAPACITANCE SHUNT



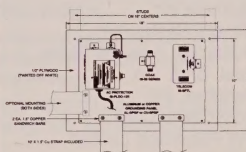
4-23 GHz MICROWAVE
DOWNCONVERTERS



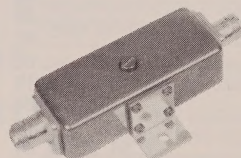
TWISTED PAIR
(TO DS-3 RATES)



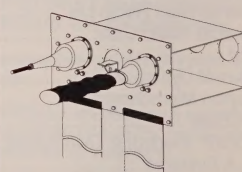
VIDEO &
TUTORIAL BOOK



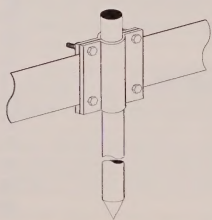
SINGLE POINT
GROUND PANEL



LAN/VIDEO



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Other Information

DAYTON®
hamvention

Bus Transportation ...

AVOID PARKING PROBLEMS BY TAKING THE HAMVENTION BUSES.

There will be Free Bus Service provided between Hamvention and our satellite parking areas which include:

1. Air Force Museum
2. Dayton Mall
3. Forest Park Plaza
4. Mendelson's
5. Salem Mall
6. Welcome Stadium

Also, free bus service is provided to: KOA Campground & Miami Valley Technology Center (formerly Montgomery County Joint Vocational School - JVS).

In addition, some motels may offer transportation to Hamvention.

	First Arrival at Hara	Last Departure from Hara
Friday	8:00 a.m.	6:00 p.m.
Saturday	6:00 a.m.	5:00 p.m.
Sunday	6:00 a.m.	4:00 p.m.

Buses will run continuously and make routes as quickly as possible. Due to changing traffic patterns and bus loads, an exact bus schedule is impossible.

Banquet Route

A bus will be available only from Miami Valley Technology Center (formerly Montgomery County Joint Vocational School-JVS) and Dayton Tall Timbers Resort (KOA) to the Convention Center.

Parking ...

We have arranged for free parking at the Air Force Museum, Dayton Mall, Forest Park Plaza, Meijer store at Route 48 and I-70, Mendelson's Electronics, Salem Mall and Welcome Stadium. See map on page 89. Please park in one of our designated parking areas and use our free shuttle bus. There are over 10,000 privately owned pay-to-park parking spaces near Hara Arena.

Campers, trailers, self-contained vehicles, or vehicles that require more than one space will not be permitted to park in the Flea Market, Salem Mall or Dayton Mall. Campers and trailers may park at Tall Timbers KOA or at the Miami Valley Technology Center (formerly Montgomery County Joint Vocational School-JVS). (fee charged, see map) after 3:30 p.m. on Friday and all day Saturday and Sunday.

Loading Pass ...

Due to the limited parking at Hara Arena, we will issue temporary loading passes to allow you access to Hara for loading large packages. Loading passes can be obtained at the Traffic trailer located in front of the Ballarena entrance (Entrance # 1). See map on page 83.

Wheelchairs ...

Wheelchairs are available at the Hamvention office with proper I.D.

Handicapped Parking ...

Handicapped visitors have been issued special parking passes in advance.

Hamvention Phone Numbers ...

Office	276-6930
Flea Market	276-6932
Exhibits	276-6931
Communications	274-1410
Forums	274-9542

Future Hamvention Dates ...

April 28, 29, 30, 1995

April 26, 27, 28, 1996

April 25, 26, 27, 1997

These dates are tentative and should be used only as a guide for future planning.

DARA Membership ...

If you would like to join the Dayton Amateur Radio Association (DARA), go to Booth #1 (next to the Prize Booth) in the Hara Arena building.

Membership through June 30, 1995: \$6

Additional family membership (at the same address): \$2 per person

Exhibitor Information ...

To receive information about becoming a new exhibitor at the 1995 Hamvention, leave your name and address at the DARA Booth or write to:

Hamvention

Exhibits Chairman

P.O. Box 964

Dayton, OH 45401-0964

10 Bands -- 1 MFJ Antenna!

Full size performance . . . No ground or radials

Operate 10 bands: 75/80, 40, 30, 20, 17, 15, 12, 10, 6 and 2 Meters with one antenna
Separate full size radiators . . . End loading . . . Elevated top feed . . . Low Radiation Angle . . . Very wide bandwidth . . . Highest performance no ground vertical ever . . .

Operate 10 bands -- 75/80, 40, 30, 20, 17, 15, 12, 10, 6 and 2 Meters -- with this MFJ-1798 vertical antenna and get full size performance with no ground or radials!

Full size performance gives you high efficiency for more power radiated. The result? Stronger signals and more Q-5 QSOs.

Full size performance also gives you exceptionally wide bandwidths so you can use more of your hard earned frequencies.

Full size performance is achieved by using separate full size radiators for 2 through 20 Meters and highly efficient end loading for 30, 40 and 75 /80 Meters.

You get very low radiation angle for exciting DX, automatic bandswitching, omni-directional coverage, low SWR and it handles 1500 watts PEP SSB.

MFJ's unique Elevated Top Feed™ elevates the feedpoint all the way to the top of the antenna. It puts the maximum radiation point high up in the clear where it does the most good -- your signal gets out even if you're ground mounted.

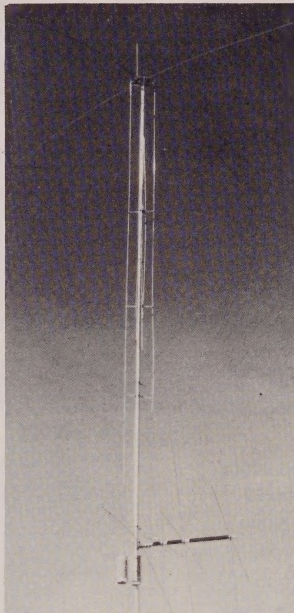
It's easy to tune because adjusting one band has minimum effect on the resonant frequency of other bands.

Self-supporting and just 20 feet tall, the MFJ-1798 mounts easily from ground level to tower top -- on small lots, backyards, apartments, condos, roof tops, tower mounts.

Separate Full Size Radiators

Separate full size quarter wave radiators are used on 20, 17, 15, 12, 10 and 2 Meters. On 6 Meters, the 17 Meter radiator becomes a 3/4 wave radiator.

The active radiator works as a stub to decouple everything beyond it. *In phase antenna current flows*



MFJ-1798

\$269⁹⁵

MFJ Super Hi-Q™

MFJ's tiny 36 inch diameter high efficiency loop antenna lets you operate 10 to 30 MHz continuously -- including the WARC bands!

It's ideal where space is limited -- apartments, small lots, mobile homes, attics, motor homes.

Enjoy both DX and local contacts when you mount it vertically. You get both low angle radiation for excellent DX and high angle radiation for local close-in contacts. Handles 1500 watts.

Super easy-to-use! Only MFJ-1786 Super Remote Control has Auto Band Selection™. It auto-tunes to your desired band, then beeps to let you know. No control cable is needed.

Fast/slow tune push buttons and built-in two range Cross-Needle SWR/Wattmeter lets you quickly tune to your exact frequency.

All welded construction, no mechanical joints, welded butterfly capacitor with no rotating contacts, large 1.050 inch diameter round radiator -- not a lousy thin flat-strip -- gives you highest possible efficiency.

Each plate 1/8 inch thick ABS plastic housing with ultraviolet inhibitors protects it. **MFJ-1782**, \$269.95. Same as MFJ-1786 but remote control has only fast/slow tune buttons.



Super 80/40M Vertical

Designed as a high performance antenna for 80 and 40 Meters, the MFJ-1792 features a full size quarter wave radiator for 40 Meters -- that's a full 33 feet of ruthless radiating power.

End loading -- the most efficient form of loading -- is used for 80 Meters. It's accomplished by a virtually lossless 4 1/2 foot capacitance hat and a high-Q coil wound with Teflon® wire on a low-loss fiberglass form.

The entire length radiates power.

High strength 6061-T6 aluminum tubing, super strong solid fiberglass insulator, Frequency Adaptive L-Network™, heavy duty swing mount. Handles 1500 watts PEP. Requires guying and radials, counterpoises or ground screen.

MFJ-1793, \$179.95. Same as MFJ-1792 but includes full size 20 Meter quarter wave radiator.

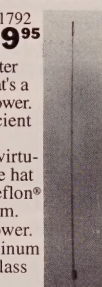
Box Fan Portable Loop

No, it's not a fan -- it's a high efficiency portable loop antenna that's about the same size and shape as a 2x2 foot box fan, complete with carrying handle.

Carry it like a suitcase, tuck it in a corner of your car or check it as baggage on a plane.

When you get there, set it on a table or desk and enjoy ragchewing or DXing.

All welded construction, covers 14-30 MHz continuously including WARC bands, handles 150 watts. Remote control has fast/slow tune buttons. Separate control cable not needed.



MFJ-1792

\$159⁹⁵



MFJ-1780

\$229⁹⁵

in all parallel radiators.

This forms a very large equivalent radiator and gives you incredible bandwidths.

These radiator stubs provide automatic bandswitching -- there is absolutely no loss due to loading coils or traps.

End Loading

On 30, 40, 75/80 Meters, end loading -- the most efficient form of loading -- gives you highly efficient performance, excellent bandwidth, low angle radiation and automatic bandswitching.

MFJ's unique Frequency Adaptive L-Network™ provides automatic impedance matching for lowest SWR on these low bands.

Tuning to your favorite part of these bands is simple and is done at the bottom of the antenna.

No Ground or Radials Needed

You don't need a ground or radials because an effective counterpoise that's 12 feet across gives you excellent ground isolation.

You can mount it from ground level to roof top and get awesome performance.

No Feedline Radiation to Waste Power

The feedline is decoupled and isolated from the antenna with MFJ's exclusive AirCore™ high power current balun. It's wound with Teflon® coax and can't saturate, no matter how high your power.

Built to Last

Incredibly strong solid fiberglass rod and large diameter 6061 T-6 aircraft strength aluminum tubing is used in the main structure.

Efficient high-Q coils are wound on tough low loss fiberglass forms using highly weather resistant Teflon® covered wire.

Teflon® is registered trademark of Dupont

MFJ halfwave Vertical

6 bands: 40, 20, 15, 10, 6, 2 Meters . . . No radials or ground needed!

Operate 6 bands -- MFJ-1796 40, 20, 15, 10, 6 and 2 Meters -- with this

MFJ-1796 ground independent halfwave vertical antenna! No radials or ground ever needed!

It's only 12 feet high and has a tiny 24 inch footprint! Mount it anywhere from ground level to tower top -- on apartments, condos, small lots, even motor homes. Perfect for vacations, field day, DX-pedition, camping.

Efficient end loading, no lossy traps. **Entire length** is always radiating. **Full size halfwave** on 2 and 6 Meters. High power air-wound choke balun eliminates feedline radiation. Adjusting one band has minimum effect on other bands.

Automatic bandswitching, low radiation angle, omni-directional, handles 1500 watts PEP. Goes together in an afternoon.

Come by and see these MFJ antennas and more . . . booths 62-64 and 83-85!

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Other Information continued

DAYTON
hamvention®

Accurate Address Information Needed ...

Did you fail to get advance Hamvention information in the mail this year? If so, there may have been a problem with your mailing address. Our mailing list is compiled from information taken from advanced registration and admission ticket stubs. The Post Office is now using a fully automated system for bulk mailing in the U.S., which requires accurate addressing and Zip+4. We process our mailing lists by computer to add the Zip+4 code and correct the spelling of Street and City names where possible. In spite of that, we were forced to discard more than 4000 addresses this year due to unreadable ticket stubs, or improper or incomplete address information.

By the time you read this, you have probably already deposited your ticket stub, but for next year, help us to get our mail to you. Check with your Post Office and use their standardized spelling, format and Zip+4.

Unofficial Functions Listings ...

To be listed in the Unofficial Functions section of the 1995 program and/or our direct mail pieces:

Contact: **Hamvention Publications Chairman**
P. O. Box 964
Dayton, OH 45401-0964

Deadline for mailer: January 3, 1995

Deadline for program: March 1, 1995

Program Advertising ...

To receive information about becoming a new advertiser in the 1995 Hamvention program, write to:

Hamvention Advertising Chairman
P. O. Box 964
Dayton, OH 45401-0964

Forum Speaker ...

If you would like to be considered as a Forum speaker for the 1995 Hamvention, write to:

Hamvention Forums Chairman
P. O. Box 964
Dayton, OH 45401-0964

Test Bench ...

Marconi Instruments will have test benches available inside the building for you to check-out your purchases (see booth 526). They will provide power, service monitor, dummy load and wattmeter. Neither DARA nor Marconi Instruments will be responsible for damage to your equipment.

Banking Services ...

Bank One of Dayton will be exchanging various denominations of bills, doing cash advances on MasterCard/VISA, and providing Cashiers Checks. Banking services for Hamvention guests will be available during regular Exhibit Hours. *For more information on available banking services, please see Bank One directly.* In addition, a VISA/MC ATM is located at the Hara main entrance near the box office. See map on pages 82 & 83 for location.



Oliver's **Steak and Seafood**

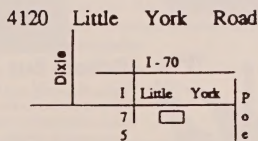
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19" Sony Monitor

Professional grade 19" Trinitron™ color monitor features both RGB and composite inputs, computer (RGB) and VTR interfaces, selectable internal/external sync, external tuner input, small internal speaker with volume control and audio inputs/outputs. Full front panel control of aperture, color, hue, brightness, picture, sync, AFC, and comb filter. Resolution: 350 TV lines, 440 x 240 pixels, horiz. and vert. linearity ±5%. Used, tested monitor comes modified with a touch screen device. No internal TV tuner Manuals included.

No. 660-0051HF.....

\$300⁰⁰ (eal)

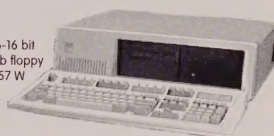


IBM® XT/286/6 Computer

Original IBM XT 286 computer includes 6 Mhz motherboard with 640k installed, 6-16 bit and 2-8 bit slots, preformatted 20MB MFM hard drive and controller, 5-1/4" 1.2mb floppy drive, CGA video card, 1 serial/1 parallel, 1200 baud modem, XT style case, and 157 W power supply. Used, tested unit comes with 101 keyboard and manual. Great low cost computer for word processing, process control, etc.

No. 220-3801HF.....

\$250⁰⁰ (eal)



Oscilloscope Probe Kit

1X/10X oscilloscope probe is useful for general purpose applications.

1 meg/10meg ohm probe comes with 1.4 meter cable and accessory kit. Compensation range: 10-35pf, 60 Mhz max band with 5.5ns min rise time, 600VDC max.



No. 570-0025HF.....

\$18.49 (eal)

Mini Vacuum Cleaner

Comes with 2 ft. hose and 10 ft. power cord. IBM part #1671347. Removed from equipment, good condition. Includes one filter bag. Operates on 110VAC, 12" (L) x 4" (dia.)



No. 650-0205HF.....

\$11⁰⁰ (eal)

Filter Bags

For above vacuum.

No. 650-0207HF.....

\$2.95 (eal)

\$1.95 (S+)

Releasable Cable Tie

14.5" long 5/16" wide Color: Neutral

No. 320-0182HF.....

10⁰⁰ (eal)

YAMAHA Carrying Case

Universal carrying case for long flat objects like tennis rackets or musical instruments. Fits objects up to 3'-5/8" (H) x 11" (W) x 26" (L).



No. 650-0098HF.....

\$3⁰⁰ (eal)

Nylon CD Carrying Case

Padded nylon CD carrying case. Includes hand and shoulder straps.



No. 650-6401HF.....

\$5⁰⁰ (eal)

Ammo Boxes

Great storage boxes. Heavy duty metal construction. Water tight.



No. 650-0177HF 11"L. x 7"H. x 4"D

No. 650-0178HF 12"L. x 7"H. x 6"D.....

\$1⁰⁰ (eal)

Power Cord

Very popular computer and monitor power cord. 18-3 cord. 6' long.



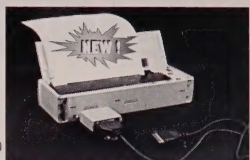
No. 630-0120HF.....

\$1.95 (eal)

\$1.65 (10+)

IBM® Convertable Printer

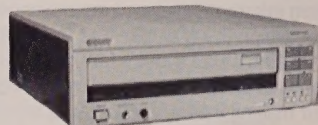
Compact printer for home or mobile use which utilizes a state - of - the art microprocessor based interface converter. This ultra-compact printer was originally used on the PC convertible computer, and features a nine pin thermal dot matrix print mechanism. Parallel interface means plug - and - play ease of use; just apply power and plug the cable into your parallel printer port. Printer and interface converter both operate on 12VDC, so mobile operation is possible. Unit can be used with either thermal fax paper or standard paper using the included ribbon. Package includes printer, ribbon, 12VDC wall adapter, parallel cable, and interface converter.



No. 220-0122HF.....

\$129⁰⁰ (eal)

Sony Lasermax Videodisc Player



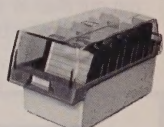
Single sided laserdisc player for 8" and 12" Laservision format. Features front panel controls plus RS-232 interface for computer control, composite and VHF signals outputs, external sync input, solid state laser, NTSC color system, rear unswitched AC outlet, and 360 line resolution. Used tested commercial grade unit has built in CX noise reduction system and front panel headphone jack.

No. 660-0052HF.....

\$300⁰⁰ (eal)

Diskette/CD Storage Cases

Convenient carrying handle with snap lock. Translucent hinged dust cover for maximum protection. Sectioned dividers for easy access. Cushioned feet to protect surfaces.



Part No.	Size	Price
220-0124HF	(40) 5.25" disks or (10) CD's	\$15 ⁰⁰
220-0125HF	(40) 3.5" disks	\$2.49
220-0123HF	(100) 5.25" disks or (25) CD's	\$2 ⁰⁰

12VDC 1 Amp Adaptor

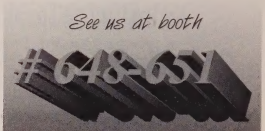
Heavy duty Dc adaptor. 120VAC. 60 Hz input. 12VDC, 1 amp output. 6 ft. cord with 2.1mm DC coaxial plug (tip negative) UL listed.



No. 600-0225HF.....

\$5.49 (eal)

\$4.95 (S+)



School Bus Alert

Home Receiver to alert Students as to the location of their Bus. Receives Signal from Bus equipped with SIMON TRANSMITTER(below). Mfg. TRANS ALERT 2000, INC.



No. 660-9403HF.....

\$8⁰⁰ (eal)

School Bus Alert Transmitter

Bus mounted Portable Transmitter that announces its location to the home unit. SIMON TRANSMITTER Mfg. TRANS ALERT 2000 ideal for students with special needs.



No. 660-9404HF.....

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Universal M-1200 A sophisticated decoder card for your PC.

Universal M-400 The ultimate reader for HF and VHF users.

SANGEAN ATS-803A

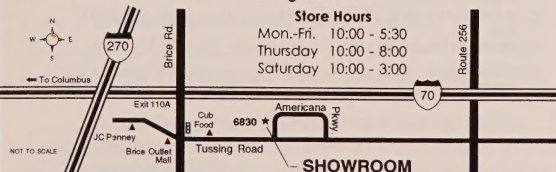


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Friday

Tours: Voice of America (Bethany Relay Station)

Tours of the Voice of America (VOA) international broadcasting facility will be offered at 1:30 p.m., and on Sunday, May 1 at 2:00 p.m. Regrettably, Saturday tours are not available since most of the Relay Station staff will be at Hamvention. Duration of the tour will be about 45 minutes. It is preferred that groups of no more than 25 be formed so that tours can be conducted in the most efficient way.

VOA is located South of Dayton on I-75. At Tylersville Road (Exit 22), drive 1 mile east to the Relay Station.

6:30 – DX DINNER (9th Annual)

Stouffer's Center Plaza Hotel (across from the Dayton Convention Center) Displays and cash bar at 6:30, dinner at 7:15 p.m.

Sponsored by Southwest Ohio DX Association. Join us for a dinner with big guns and little pistols, then visit the many DX hospitality suites in the hotel afterwards! Advance reservations are required.

6:30 – QCWA DINNER - QCWA - OOTC

Banquet at Alex Continental Restaurant, I-75 Exit 44, 1/3 mile west of St. Rt. 725 in Dayton. C.O.D. bar at 6:30 and dinner at 7:30 p.m.

Advance reservations required.

7:00 – ATVQ ATV PARTY

Holiday Inn North, Wagoner Ford Rd at I-75. 7:00 p.m. to Midnight. Main Ball Room.

Sponsored by ATVQ Magazine, the traditional Friday night ATV party draws hundreds in attendance every year. This year will feature snacks and beverages as usual plus a great line up of ham TV speakers. Included will be the famous Hamcamvan from Marysville, Ohio with live ATV demos, a minicam shootout (bring your lookie talkie), a homebrew contest, bring your VHF, UHF and ATV gear, you may win \$100 cash! Speakers cover the gamut of ATV activity including balloons, rockets, R/C Model ATV, DX, construction, contesting, antennas, equipment and operations. Don Miller will sponsor the SSTV symposium in the adjacent room allowing guests to circulate between both rooms if desired. Featured speakers include Paskeon SSTV, Mike Emmerson and a new high resolution SSTV system.

7:00 – CONTEST SUPER SUITE

Stouffer Center Plaza (across from the Dayton Convention Center), Miami Room (2nd Floor)

Sponsored by the North Coast Contesters and the Frankford Radio Club. Large Ballroom Suite (Room for 400 testers and DXers). Cash bar.

7:30 – SSTV GET TOGETHER

Holiday Inn North, 2301 Wagoner Ford Road

Tom Hibben, KB9MC, and Don C. Miller, W9NTP will host. The latest developments in SSTV from four continents will be presented. Many of the systems appearing in the SSTV booth 212 will be discussed or previewed. IVCA will discuss their program. Everyone is invited to participate. Come early and stay late.

7:30 – TAPR's NATIONAL BBS SPECIAL INTEREST GROUP MEETING AND TAPR HOSPITALITY SUITE

Radisson Hotel, 2401 Needmore Road at I-75

TAPR will host its second meeting of the year for the National BBS SIG. A must for BBS operators who want to discuss national issues. Afterwards, the room will be open for discussion on packet topics in general. The TAPR/AMSAT DSP-93 will be available for viewing. Come by and visit TAPR and talk about packet radio in the US and find out more about what TAPR is developing for the future of packet radio.

8:00 – FAR-OUT A.R.C. HOSPITALITY BLITZ (15th Annual)

K. of C. Party Room, 267 Bainbridge Street at 8:00 p.m. (just 3 blocks east of Stouffer's Hotel) at same location as last year.

Complimentary snacks and beverages. Talk-in on 147.135 (+)

8:00 – NATIONAL PACKET ROUND TABLE

Rodeway Inn Conference Center (I-75 and Little York Road)

General discussion of Packet Radio. A must for those involved in packet networking.

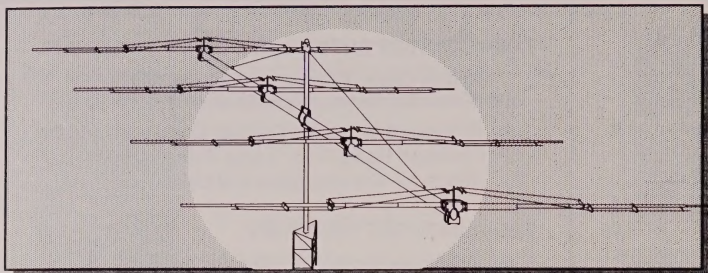
8:00 – WESTERN NEW YORK DX ASSOCIATION

Hospitality Suite at the Stouffer Hotel in Suite 325

Drop by for an eyeball with the Big Guns and Little Pistols. Everyone is welcome.

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Here's a peek at the latest addition to our HF arsenal: The DX234-4, a new breed of TRIBANDER for 20, 30, and 40 meters! The DX234-4 is a full 4 element Yagi on a 42' boom. It looks and performs like our rugged

40 meter model, yet delivers even more firepower on 30 and 20 meters. The DX234-4 combines decades of hands-on HF experience and the latest techniques in computer optimized design and construction: Massive CNC machined element mounting plates, 1-1/4" O.D. solid fiberglass rod insulators, sleeved element butts for

increased strength and a unique 3/16" rod linear loading system. No traps! 3 kw power handling. 3, 2, and 1 element models will also be available.

Pair up with our 17-30LP7 high performance Log Periodic and enjoy high gain, two feedline, low wind area performance from 40 to 10 meters....maybe turn it with our new OR-2800 Rotator that handles arrays up to 35 sq ft in wind area.

Well, you get the idea. M² has the goods to make HF work for you. Want to know more? Drop by for a visit at the convention and experience M² quality up close.

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Saturday

12:00 – E. A. R. S. (Evansville, Indiana)

"Eating Meeting"

Salem Mall, Food Court. 12:00 p.m. All hams and prospective hams are welcome.

6:00 – CONTEST BANQUET (2nd ANNUAL)

Stouffer Center Plaza (across from the Dayton Convention Center), Miami Room (2nd Floor)

Sponsored by the North Coast Contesters, the Frankford Radio Club and other contest clubs. Seating is limited.

6:00 – LAMBDA AMATEUR RADIO CLUB

EconoLodge, (2221 Wagoner Ford Road) (Headquarters)

Annual club business meeting.

6:30 – GRAND BANQUET OF THE MEDICAL AMATEUR RADIO COUNCIL (28th ANNUAL MEETING)

Radisson Inn, Dayton

Attitude Adjustment at 6:30 p.m. Banquet at 7:30.

7:00 – CONTEST SUPER SUITE

Stouffer Center Plaza (across from the Dayton Convention Center), Miami Room (2nd Floor)

Sponsored by the North Coast Contesters and the Frankford Radio Club. Large Ballroom Suite (Room for 400 contesters and DXers). Cash bar.

7:30 – WEATHER SATELLITE USERS MEETING

Holiday Inn at I-675, 2800 Presidential Drive, Fairborn, Ohio (513) 426-7800

Meet the speakers and vendors one-on-one. A variety of topics, from beginning to advanced, on direct reception of weather satellite images. Seating for 100. 7:30 p.m. to midnight.

8:00 – ANNUAL LAMBDA ARC CLUB BANQUET

Bombay Bicycle Club, 3700 North Dixie Drive (1 block west of EconoLodge)

8:00 – TAPR OPEN PACKET DISCUSSION AND TAPR HOSPITALITY SUITE

Radisson Hotel, 2401 Needmore at I-75 (Premier Room)

Greg Jones, WD5IVD, will host an open packet

discussion concerning future directions of packet in the US and how TAPR can help support packet radio operators. Come by and find out what TAPR is doing in packet radio. The discussion is after the Packet Dinner, come by the TAPR booth for directions.

8:00 – WESTERN NEW YORK DX ASSOCIATION

Hospitality Suite at the Stouffer Hotel in Suite 325 from 8:00 p.m.

Drop by for an eyeball with the Big Guns and Little Pistols. Everyone is welcome. Refreshments and entertainment.

9:00 – HOGMASTER OF THE YEAR AWARD

Holiday Inn at Wagoner Ford Road Poolside

The Hogmaster Association of greater Prince George's County Maryland will host an informal gathering of all HAMS and HOGS. Richard Hartnett, KA3KYW, will be presented with his well-deserved HOGMASTER OF THE YEAR award by the board of directors. SEE YOU THERE!

Sunday

MORNING

8:30 – TIN CAN HAMS

A breakfast for ex-US Navy Destroyermen who are hams will be held at Old Country Buffet, 5597 Salem Avenue (Consumer's Square). All Tin Can sailors are invited. Contact Frank Schwab, W8OK (513) 890-4764 for information.

AFTERNOON

Tours: Voice of America (Bethany Relay Station)

Tours of the Voice of America (VOA) international broadcasting facility will be offered at 2:00 p.m. Duration of the tour will be about 45 minutes. It is preferred that groups of no more than 25 be formed so that tours can be conducted in the most efficient way.

VOA is located South of Dayton on I-75. At Tylersville Road (Exit 22), drive 1 mile east to the relay station.



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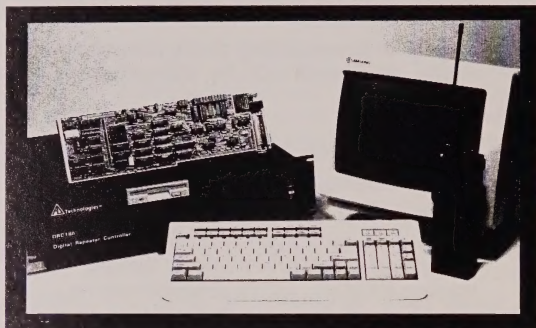
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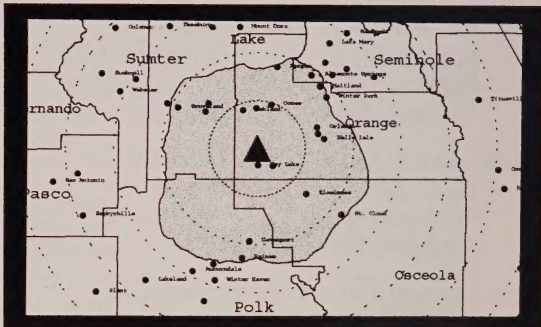
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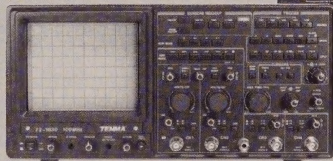
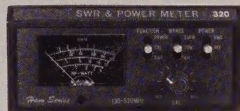
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1961-1962 — Joseph H. McNutt, W8GFN
1963-1964 — Sheemon A. Wolfe, W8WJL
1965-1966 — Edgar A. Smith, W8RKL
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1968-1969 — Jack Ohmart, K8CUA
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1986-1987 — Jim Simpson, WB8QZZ
1988-1989 — Bill McNabb, WD8SAY
1990 — Ed Hillman, N8ALN
1991-1992 — Ross Brown, WA8DQH
1993 — Dave Grubb, KC8CF

While You're Here ...

Air Force Museum

The world's largest aviation museum with 10 1/2 acres of aircraft and other exhibits under roof is a free attraction which is family oriented and includes over 200 airplanes such as the Sopwith Camel, the B52 and B1A bombers and the F117A Stealth Fighter, as well as the Apollo 15 capsule which circled the moon in 1971, plus more than 6,000 personal artifacts, documents, photographs and mementoes of Air Force history from the early 1900's. Free historical movies are shown daily in the museum's 500 seat auditorium. Also available for your convenience are an extensive gift shop, bookstore, cafe and picnic shelters.

The newly opened IMAX Theatre will put you in the heart of the action (which the astronauts described as "the next best thing to being there"). Films shown are "The Dream is Alive" (the effect of being weightless with the astronauts) shown at 10, 12, 2 and 4 (40 mins), and "To Fly" (the ecstasy of flight with the Blue Angels, and a magnificent hot air balloon flight) shown at 11, 1, 3 and 5 p.m. (30 mins).

Saturday only special Hamvention showing of "To Fly" at 6:00 p.m. IMAX admissions are \$4 Adults, Sr. Citizens \$3.50, students \$3 and ages 2 to 7, \$2.00. Hours of operation are 9:00 a.m. to 5:00 p.m. daily. The Museum is also very accessible to those with disabilities.

Northeast of Dayton on Wright-Patterson Air Force Base
255-3284

Take I-75 to Exit 58. Take Needmore Road (Wright Brothers Parkway) east 6 miles to Springfield Pike exit. Turn right at the bottom of the ramp onto Springfield Pike. Museum is on the right.

Take I-70 to Exit 41 (SR 4). Take SR 4 south 6.5 miles to Harshman Road exit. Turn left at the bottom of the ramp onto Harshman Road (Wright Brothers Parkway) and travel 1 mile to Springfield Pike exit. Turn right at the bottom of the ramp onto Springfield Pike. Museum is on the right.



Aullwood Garden

Aullwood Garden is a 32 acre park which offers the visitor a walk through a lovely area of blooming plants in a wide variety of species and colors to please your senses. Open daily from 8:00 a.m. to 7:00 p.m., the Gardens are located at 900 Aullwood Road which is close to the Englewood Reserve.

North of Dayton near Englewood Reserve. Take I-70 to Exit 29 (SR 48).

Take SR 48 north to US 40. Turn right onto US 40 and cross the dam. Park in the Englewood Reserve parking lot at the east end of the dam. Be careful crossing the road and walk 200 yards down Aullwood Road, past Aullwood Audubon Society, to Aullwood Gardens.

Aviation Trail/Wright Cycle Company

Aviation Trail/Wright Cycle Company welcomes you to Wright-Dunbar Village, the home of Orville and Wilbur Wright, the fathers of aviation, and Paul Laurence Dunbar, the poet who charmed the world with his lyric genius. As teenagers, the Wrights published the early poems and essays of Paul Laurence Dunbar, who was a classmate of Orville's and a friend to both brothers. Dunbar left this area behind as he gained national and world renown. By 1900, Dunbar was a world figure whereas, outside of Dayton, only a handful of glider enthusiasts knew of the Wrights. Orville and Wilbur Wright began their careers as printers while still in school, but after graduation they entered the bicycle business and finally, aviation. You will be stepping directly into history as you walk upon the original floors where Orville & Wilbur did their planning and building. Exact replicas of the machinery used by the brothers is on the site, as well as original bicycles from that era. They had seven printing press businesses, five bicycle shops, and three buildings where they worked on the airplane.

Near downtown Dayton west of I-75. 443-0793. 10-4 Saturday, Noon to 4 Sunday. National Historical Landmark.

Take I-75 to Exit 53 A/B (Third Street). Take Third Street west over the river 0.5 mile to Williams Street. Turn left onto Williams Street. Wright Cycle Shop is one short block on the left.

Carillon Historical Park

The Park will be opened for Hamvention visitors on Sunday, May 1, 1994 from 12:00 noon to 4:00 p.m. (\$1.00 admission).

CARILLON
HISTORICAL
PARK
DAYTON, OHIO

The Carillon Historical Park houses a unique collection of historical buildings and exhibits which tell the story of the development of Dayton and the Miami Valley. Among the most noteworthy in this collection are Wilbur and Orville Wright's first practical airplane, antique Dayton-made automobiles including a 1912 Cadillac first equipped with Charles F. Kettering's self-starter, a replica of the Wright Bicycle Shop, a Barney and Smith wooden railroad car, a functioning 1930 letter press Print Shop, a section of the Miami/Erie Canal and Dayton's first log building. The beautifully kept grounds with tree shaded areas are an enticement to picnickers. Pack a lunch and enjoy nature at its best. Plan time in your visit to see, and hear, the Carillon Tower which houses exposed bells which are played at different times throughout the day.

Just south of downtown Dayton. 2001 S. Patterson Blvd. 293-2841.

Take I-75 to Exit 51 (Edwin C. Moses Blvd). Take Edwin C. Moses Blvd. east 0.9 mile to Stewart Street. Turn right onto Stewart Street and cross the bridge. Turn right at end of the bridge onto Patterson Blvd. Carillon Park is 0.6 mile on the right.

Carriage Hill

The Park District's Carriage Hill Farm is a living historical farm recreating the lifestyle of a conservative farming family of the 1880's. Watch the draft teams and farm hands prepare the fields for planting. (Sunday, May 1, Weather Permitting). The sulky plow, disk and spring-tooth harrow turn and smooth the soil just as they did a century ago. Many craft items are for sale so you can take home a memory of the day you touched the past.

North of Dayton and I-70. 7860 Shull Road. 879-0461

A \$1.00 donation is requested. Take I-70 to Exit 38 (SR 201). Take SR 201 north 0.5 mile to Shull Road. Turn right onto Shull Road and follow the signs.

Dayton Museum of Natural History

The \$4 million structure boasts many new attractions including a hands-on learning center for grade school through junior high, a physical science "Doing the Wave" display on wave phenomena, which includes demonstrations on light, objects, sounds, and radio waves, Bio-Ohio, Wild Ohio, a learning center for pre-schoolers, a computerized Digistar Planetarium which creates spectacular three dimensional effects, and a special exhibit which includes an audiovisual presentation in the Sun Room. Visit on Friday from 1 p.m. to 5 p.m., Saturday from 9 a.m. to 5 p.m. and Sunday from 1 p.m. to 5 p.m. A nominal fee of \$3.00 for adults, \$1.50 for persons 3 - 16 years of age and \$2.50 for Seniors is charged. The planetarium is an additional 75 cents per person. Children 2 and under are admitted free.

Just north of downtown Dayton. 2600 DeWeese Parkway. 275-7431

Take I-75 to Exit 58 (Needmore Road). Take Needmore Road 1.5 miles west to Riverside Drive. Turn left onto Riverside Drive and go 1.3 miles to Siebenthaler Avenue. Turn left onto Siebenthaler and cross the river. Immediately turn right onto DeWeese Parkway. The museum is 0.6 mile on the left.

Cox Arboretum

Located on 164 acres, with 85 of those acres being cultivated and offering many trails for the hiking enthusiasts, along with an edible landscape garden offering demonstrations on plantings of nuts, fruits, herbs, vegetables and other plantings. You will also find a large array of bulbs in bloom, two large ponds where the ducks are eager to munch on bread cubes and the Visitor's Center has a display on horticulture presented by well known artists. The grounds are available to you from 8:00 a.m. until dusk, while the buildings are open on Sunday from 1:00 p.m. to 4:00 p.m.

South of Dayton near the Dayton Mall. 6733 Springboro Pike (SR 741). 434-9005

Take I-75 to Exit 44 (SR 725). Take SR 725 east 0.3 mile to SR 741 (Springboro Pike). Turn left onto SR 741. Cox Arboretum is 1 mile on the left.

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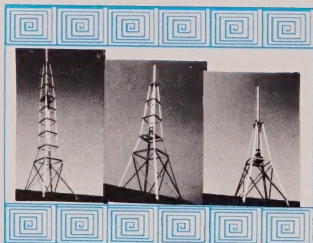
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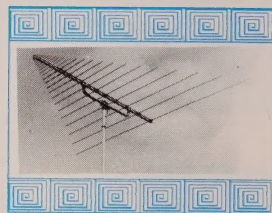
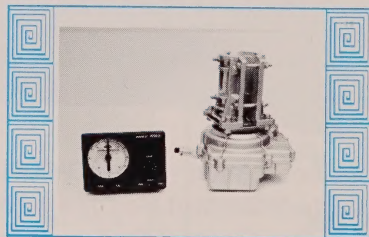
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Dayton Art Institute

Founded in 1919, the Dayton Art Institute opened at its current location in 1930. The Italian Renaissance building is listed on the National Register of Historic Places. The classic structure provides a unique home for internationally-known collections including the outstanding Art of Our Time contemporary collection, European and American paintings and sculpture, an exceptional Asian wing, and notable collections of decorative arts, textiles and graphic arts. Elevators and ramps make all public areas of the Institute accessible to the handicapped.



Downtown Dayton west of I-75. Forest and W. Riverview Avenues. 223-2411 (recording). 223-5277. Tuesday through Sunday Noon to 5.

FROM NORTH: Take I-75 Southbound to Exit 54A (Grand Avenue). At the second light, turn left onto Forest Avenue. Turn right onto Belmonte Park North to the parking lot on the right.

FROM SOUTH: Take I-75 Northbound to Exit 53B (First St./Salem Avenue). Turn left at the light at the bottom of the ramp and cross the bridge. At the light at the end of the bridge, turn right onto Riverview Avenue. Go three blocks and turn left on Belmonte Park North. Turn right into the parking lot.

Sunwatch

TWELFTH CENTURY INDIAN VILLAGE

800 years ago they waited and watched for the sun to rise behind the sacred pole and cast the long shadow. Only then would the time be right. Research over a period of 17 years has uncovered an amazing array of artifacts depicting the social life of the 12th century. Find out how the 800 year old lodges are reconstructed from archaeological evidence and visit the interior of a reconstructed lodge.

Near downtown Dayton west of I-75. 2301 West River Road. 268-8199. 9-5 Tues - Sat. Noon - 5:00 p.m. Sunday.

Take I-75 to Exit 51 (Edwin C. Moses Blvd.). Take Edwin C. Moses Blvd/Nicholas Road west 1.3 miles to West River Road. Turn left onto West River Road. Sunwatch is 1.0 mile on the right.

Glen Helen/Clifton Mill/ Ye' Old Tavern

YELLOW SPRINGS, OH.

Glen Helen Trails is a 1000 acre nature preserve located on the Antioch University College campus where you can enjoy a nature lodge, beautiful wildlife, vegetation and rock formations. Clifton Mill is a restored operating grain mill. Tours are available. Ye Old Tavern is a restored operating turn-of-the-century tavern. There are also many unique shops and restaurants in Yellow Springs.

South of Springfield at Yellow Springs and Clifton.

GLEN HELEN — Take I-70 east to Exit 52A (SR 68). Take SR 68 south 7 miles to the first stoplight in Yellow Springs. Turn left and look for Glen Helen 2 1/2 blocks on the left.

YE' OLE TAVERN — Take I-70 east to Exit 52A (SR 68) Take SR 68 south 7 miles to Yellow Springs. Look for the Tavern.

CLIFTON MILL — Take I-70 east to Exit 54 (SR 72). Take SR 72 south 6 miles to Clifton. Look for signs to Clifton Mill.

International Women's Air & Space Museum

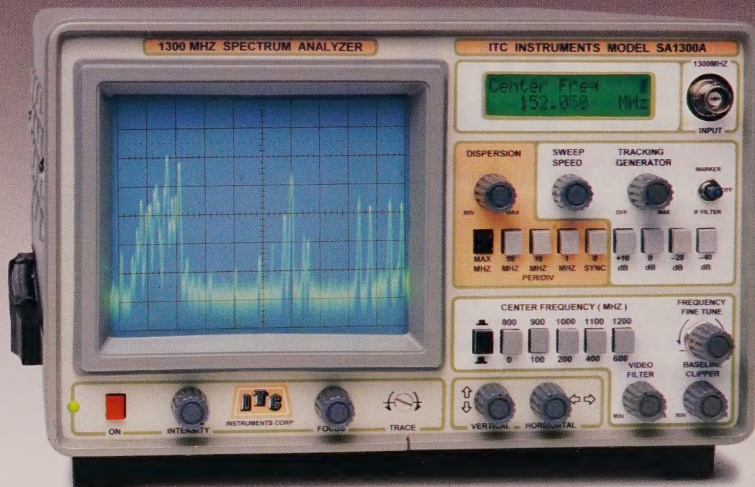
Woman's place in aviation started long before the so-called "women's movement" of recent years. In fact, did you know that Napoleon appointed a woman, Madame Blanchard, as his Chief Air Minister of ballooning in 1804. Katharine Wright, although not a pilot herself, was a very powerful force in the encouragement of the Wright Brothers' advancement in aviation. Over 15 years ago the idea of preserving the history of women in aviation was a dream. Since then memorabilia and historical artifacts have been collected, preserved and stored, making this initial dream a reality today. The museum is open to the public from 10 a.m. to 4 p.m. on Saturday.

South of Dayton and east of the Dayton Mall. 26 North Main Street, Centerville. 433-6766

Take I-75 to Exit 43 (I-675). Take I-675 to Exit 4 (SR 48). Take SR 48 south 1.0 mile to the museum on the northeast corner of the intersection of SR 48 (Main Street) and SR 725 (Franklin Street).

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Covers 1-1300 MHz and 850-1850 MHz in one sweep. Ideal for Satellite service. The **SA1800B** has the same general specifications as the model SA1300A.

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OPT. 3 +/- 5KHz Res B.W	\$350.00
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Old Tiptecanoe City Restoration Area

Whether you have an hour or a day, an interest in art, antiques and collectibles, or just enjoy shopping, Historic Tiptecanoe City is a must! This 1840's Miami-Erie Canal town offers hours of pleasure browsing the selections of over 50 antique dealers, 15 or more specialty shops in the renovated 1850's Old City Hotel, historical museum, art galleries and exhibits, and excellent dining opportunities.

You might want to stop first at the TIPECANOE AND TYLER TOO! VISITORS CENTER at 12 E. Main Street where friendly folks will provide you with information on this town formerly called "Tiptecanoe". As you browse the specialty shops in the Hotel Gallery, you'll be amazed at the size of the rooms compared to your current lodgings - no king-sized beds could fit in these cozy spaces! You can revel in history as you sip coffee and join in the merriment at the Potter's House Cafe.

You'll also discover handcrafted reproductions, an old canal lock at Tiptecanoe Roller Mills, many other shops offering everything from pipes and a blending bar to over 50,000 gently used books. Historic Tiptecanoe City invites you to poke, prod and seek out the many interesting aspects of this unique community.

Take Northbound I-75 to Exit 68 (SR 571) at Tiptecanoe City. Turn onto SR 571 and go 1.0 mile east to the shops of Old Tiptecanoe City.



60th ANNUAL

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Fairgrounds flea market open noon Friday. Programming and exhibits start Saturday at 8:30 a.m. Hotel activities begin Friday afternoon.

Hotel headquarters: Rochester Marriott Thruway Inn. Call hotel reservations direct 716-359-1800. For reservations at other hotels, call Hamfest official travel agent, Gallery of Travel, 800-724-2046.

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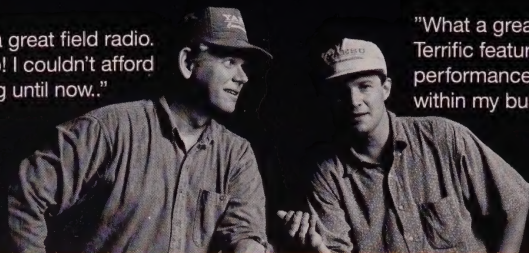
Spectrum Electronic Products include voice I.D.E.R., DTMF Control and programming, hang handheld repeater controller, and time-out timers. Digital No larger than most handheld Voice Operated Squelch radios, the HRC-10 converts (DVOS™), telemetry tones, a single or dual-band radio and private voice mail slot. into a full featured simplex or duplex repeater system. Key features of the HRC-10 include: **Phone 408-438-2788 FAX 408-438-6027 \$299**

NEW

"What a great field radio. Mobile, too! I couldn't afford an HF rig until now.."

"What a great price! Terrific features, high performance – and within my budget."

"Yaesu did it again!"



FT-840 Compact HF Transceiver

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RX: 100 kHz-30 MHz
TX: 160-10 m
- IF Shift
- 100 Memory Channels (Independent TX/RX per memory)
- Twin Band Stacking VFOs
- FM* Repeater Operation Automatic 10-Meter Repeater Offset w/Selectable CTCSS Encode
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FC-800 External Remote Antenna Tuner
- **Accessories:**
Contact your Dealer for full details.
- * Optional

It's a small price to pay for such a wealth of features.

FREE Yaesu Cap at Yaesu Booth with your Dayton Hamvention Proof of Admission



If you're trading up from an older rig, but have a budget, you want the most you can afford in top-notch HF. Then the FT-840 is for you. It's right on the money! Considering a mobile HF or field radio and doubt the quality and features of tiny HF rigs? Then the FT-840 is for you. It won't disappoint you!

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automatic 10-m FM (optional) repeater offset with selectable CTCSS. Even two optional external antenna tuners to customize your rig.

Top of the line quality and features at a remarkably low price. Just what you'd expect from Yaesu! For high-tech performance, and a wealth of features that won't break your budget ask your dealer about the FT-840.

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Friday Forums

- 1:00 - 2:45** AMSAT (SESSION #1) ROOM 1
Moderator: Keith Baker, KB1SF
Speakers: "Getting Started on the Amateur Radio Satellites", Keith Baker, KB1SF
 VP Strategic Planning, AMSAT North America
 "Operating Packet Satellites from the Ground Up",
 John Hansen, WAØPTV, Editor, The AMSAT Journal
- 1:00 - 3:00** HOW TO EFFECTIVELY USE HAM RADIO IN THE CLASSROOM (SESSION #2) ROOM 2
Moderator: Carole Perry, WB2MGP
Speakers: "Live Demonstrations of Classroom Activities", Gordon West, WB6NOA
 "Shuttle Retransmission - Goddard Space Center", Vicki Gigante, KA3PVS
 "Newsline Young Ham Award", Bill Pasternak, WA6ITF
 "SWL in the Classroom", Bob Grove, WA4PYQ
 "SAREX in the Classroom", Jim Wilmerding, N4MDC
 Author of "Teens in Ham Radio" Books, Cynthia Wall, KA7ITT
 Other Surprises!
- 1:00 - 4:45** PACKET RADIO (SESSION #4) ROOM 4
Moderator: Robert Neben, K9BL
Speakers: "Packet Radio for the Beginner", Greg Jones, WD5IVD
 "Packet Parallel Connection (PCON)", Paul Newland, AD7I
 "DSP 93", Bob Stricklin, N5BRG
 "BBS SIG Update", Dave Wolf, WO5F
 "Interfacing Weather Data to Packet", Mel Whitten, KØPFX
- 1:00 - 4:45** ANTENNAS (SESSION #5) ROOM 5
Moderator: Tim Duffy, K3LR and Scott Jones, WR3G
Speakers: "Antenna Basics and More", Roy Lewallen, W7EL
 "All the Right Angles at All the Right Times", Eric Scaze, K3NA
 "Performance of Antennas Over Irregular Terrain", Dr. James Breakall, WA3FET
 "The Study of Long Path Propagation at 28 MHz", Carl Luetzelschwab, K9LA
 "Installation Hints for Constructing Towers", John Brosnahan, WØUN
 "New Developments on 80 Meter DX Antennas"
 "The Design and Construction of a Full Size 40 Meter Yagi",
 John Devoldere, ON4UN and Roger Vermet, ON6WU
- 1:00 - 3:00** INTERNATIONAL HUNGARIAN AMATEUR RADIO CLUB (SESSION #7) ROOM 7
Moderator: Steven Miskey, KE8J
Guest speaker: "Digital Voice Mailbox", Gizella Emmer, HG5BAM and HA5AM
Speakers: Dr. Leslie Radnay, W1PL, Editor
 Theodore Tarr, K16GV, President Elect
 Peter Novak, KF2OL, Executive President Elect
 John Emmer, HA5AM, European Director
 Robert Szüle, N8HHE
- 2:00 - 3:00** ELECTRICAL SAFETY DEMONSTRATION (SESSION #6) ROOM 6
Moderator: George Maurer and Tony Norman, Dayton Power & Light

FT-11R/41R 2m/70cm Handhelds

• Frequency Coverage:

Wide Receiver Coverage:
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• New Compact Battery Design
4.8V produces 1.5 Watts
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FBA-14 6 AA Size Battery Case

FTS-26 CTCSS Decode Unit

NC-50 Dual Slot 1-Hour Desk

Charger

CA-10 Charge Adapter

(required w/ NC-50)

*FT-11 Only.

FT-41, 3.5 Watts

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display and a 4.8V
battery. Terrific!"

"Small and thin –
with a full sized keypad!
How'd they do that?"

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NEW Alphanumeric Display

First time for Yaesu HT
Full function LCD
combines letters and
numbers.

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Thumb Control
with Volume and
Squelch Bar Graph.
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NEW Compact
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check out all the new features. Like the alphanumeric display. This Yaesu HT first, lets you tag your favorite frequency by name, call sign or number. Or, the new "voltage stings" battery. It's an industry first for amateur radio. Smaller and compact, the 4.8V battery gives you 1.5 watts on TX. And, if that's not enough, there's an optional drop in, dash mount battery charger.

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3:00 - 4:45 COUNTY HUNTERS (SESSION #8).....ROOM 1

Moderator: John B. Sebastian, N8BGF, Great Lakes Director for MARAC

Speakers: "CQ Magazine Awards Custodian", Norm Van Raay, WA3RTY,
"MARAC Awards Custodian", Pete Peterson, K4QFK
"CW County Hunting", Harry Brundridge, NFØX,
"County Hunting Without Relays", Herb Morgan, WD9GBH,
"YL and OM Team Putting Out Counties", George & Joyce Judy, KD8HA, KD8HB

3:15 - 4:45 QRP RADIO CONSTRUCTION (SESSION #9) ROOM 2

Moderator: Rev. George Dobbs, G3RJV

Speakers: Editor of Practical Wireless, Rob Mannion, G3XFD, the UK's top selling
Ham Radio magazine, will introduce the subject.
G QRP Club and well-known amateur radio author in the UK, George Dobbs, G3RJV,
will present practical ideas, circuits and projects which have helped the revival of
amateur radio construction in the UK and Europe.

3:15 - 4:45 OPERATING TECHNIQUES FOR THE NEW OR INEXPERIENCED HAM (SESSION #10).....ROOM 7

Moderator: Mitchell Stern, WB2JSJ

Speakers: "How to be A Good Operator", Mitch Stern, WB2JSJ
"Operating for New Novices and Technicians", Ronni Stern, KA1NRR
"Tips for Successful DXing or Contesting", Mitch Stern, WB2JSJ

Saturday Forums

8:30 - 1:30 VHF/UHF/MICROWAVE FORUM (SESSION #15) ROOM 5

Moderators: Joe Burke, WA8OGS and Merle Rummel, W9LCE

Speakers: "Faster Than the Speed of Light", Bill Parker, W8DMR
"Current Trends in VHF/UHF/Microwave", Emil Pocock, W3EP and Joe Lynch, N6CL
"Taking the Magic Out of Microwave- Using No-Tune Transverters", Tom Whitted,
WA8WZG
"Backpacking a VHF QRP Portable Station", Peter Putman, KT2B
"The VE3ONT Algonquin Moonbounce Expedition: The 150 Foot Diameter Radio
Telescope Operation and Future Operating Plans", Mike Owen, W9IP/2
and Peter Shilton, VE3VD
"Low Noise Pre-Amps - 50 MHz thru ? GHz", Kent Britain, WA5VJB
"Spread Spectrum Communications", Dave Wood, WB4KPD

9:00 - 1:00 DX FORUM (SESSION #11) ROOM 1

Moderator: Steve Bolia, N8BJQ

Speakers: Terry Dubson, W6MKB and the 3YØPI Crew
"DXAC", Bob Beatty, W4VQ
"ARRL DXCC", Bill Kennamer, K5FUV
"The 1992 Pacific Expedition", Holger Hannemann, DL7VTM
"1993 C51A Expedition", Richard Grantham, VE1AI

3YØPI Crew: Robert Wilber, N4GCK
Anthony de Prato, WA4JQS
Ralph Fedor, KØIR
Robert Schmieder, KK6EK
Luis Chartarisky Golberg, XE1L
Peter Casier, ON6TT
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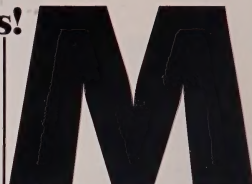
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Our newest SWR Analyzer™ covers 1.8-170 MHz continuously. Built-in 10 digit LCD frequency counter. Ball-bearing vernier readout drive on tuning capacitor makes it easy to set frequency precisely. Automatic SWR reading. Plug-in your antenna, set your MFJ-259 to the frequency you want and read SWR. 4 instruments in one -- RF signal generator, 170 MHz frequency counter, SWR analyzer and resistance meter. Handheld. Operates with batteries or with optional AC adaptor MFJ-1312B, 4x2 1/4x6 1/4 inches.

MFJ-249, \$199.95, like the MFJ-259 less RF resistance meter.
MenuDriven Memory Keyer™



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Super MenuDriven Memory Keyer™ MFJ-493, \$139.95 is the world's most sophisticated memory keyer. Stores 32,000 characters! Plug-in AT keyboard and it turns into full featured CW keyboard. Serial port lets your computer control your keyer, compose, edit, display, save messages and record your transmissions. **FCC Exam Simulator, QSO Simulator, Word Recognition Trainer**, remote control jack, plus all the features of MFJ-492.

Personal Morse Code Tutor™

Learn MFJ-411 Morse Code **\$79.95** anywhere with this MFJ pocket-size Morse Code Tutor™

Learn from zero code speed with beginner's course to Extra Class with customized code practice. Has Random QSO mode like FCC Code Exam and Word Recognition mode--lets you learn to copy entire words. Two-digit LEDs display speed or selected function. Easy-to-use menu select system -- no keypad or complex sequence to remember. Built-in speaker, headphone jack. Compact 3x1 1/2x5 1/2 inches. Uses 9 volt battery (not included) or optional AC adaptor for 110 VAC, MFJ-1312B, \$12.95.

MFJ 1/2 Wave GroundPlane

MFJ-1750 \$19.95
You get a 300 watt 1/2 wave ground plane home antenna for 2 Meters that gives you the maximum possible calculated gain of any single element antenna. Shunt feed matching network for lowest possible SWR over the entire 2 Meter band. Plus it bleeds off unwanted static. **Rapid-Tune-Radiator™** ceramic insulator, easy installation to any 1 or 1 1/2 inch mast with single U-bolt. **Improved 1/2 wave ground plane \$12.95**

MFJ-1740 \$12.95
You get an improved 300 watt 1/2 wave ground plane for 2 Meters that'll bring up repeaters as well or better than any 1/2 wave ground plane -- even if it cost twice as much. **Portable 3 element beam for 2 Meters**

MFJ-1763 \$39.95
MFJ's portable 3 element beam for 2 Meters. Its unique design lets you set it up or take it down in seconds! Elements simply screw into the boom. It's easy to store and sturdy enough to use as your home station antenna.

Center, vertical and horizontal or end feed boom. Compact 2 1/4 ft. boom gives you a calculated gain within 1 dB of a four element Yagi. Lightweight aluminum, 2 lbs., easy mount to mast or tower leg.

MFJ-1730, Pocket Roll-Up, \$14.95, 2 Meter 1/2 wave vertical roll-up perfect for traveling.

Mobile Antennas
A. MFJ-1728, \$24.95. Maximum Gain 1/2 wave mobile magnet-mount antenna, 300 watts, 12 feet coax. PL-259 connector.
B. MFJ-1724B, \$14.95. Dual Band Magnet-mount 144/440 MHz 1/2 wave on 2 M and gain on 440 MHz. 300 watts, 12 ft. coax. PL-259 connector and BNC adaptor.

MFJ Coax Antenna Switches



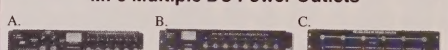
MFJ-1701 \$34.95 Select any of several antennas from your operating desk with these **MFJ Coax Switches**. Features mounting holes and automatic grounding of unused terminals. Comes with MFJ's 1 year unconditional guarantee.
MFJ-1701, \$34.95. Six position HF antennas switch. SO-239 connectors. 50-75 ohm. 3x2x2 inches.
MFJ-1702B, \$21.95. 2 position plus center ground, 2.5 KW PEP, 1KW CW, insertion loss below .2 dB, 50 dB isolation at 450 MHz, 50 ohm, 3x2x2 in.
MFJ-1704, \$59.95. 4 position switch with lightning/surge protection device. Center ground 2.5 KW PEP, 1KW CW. Low SWR. Isolation better than 50 dB at 500 MHz. Negligible loss. 50 ohm. 6 1/4x4 1/4x1 in.

MFJ Dummy Loads/Low Pass Filter



MFJ has a full line of dummy loads to suit your needs. Use a dummy load for tuning to reduce needless (and illegal) QRM and save your finals.
A. MFJ-260B, \$29.95. VHF/HF, air cooled, non-inductive 50 ohm resistor. SO-239 connector. Handles 300 watts. Runs full load for 30 seconds, derating curve to 5 minutes. SWR less than 1.3:1 to 30 MHz. 1.5:1 to 150 MHz. 2 1/2x2 1/4x7 inches.
B. MFJ-264, \$59.95. UHF/VHF/HF 1.5 KW load. Low SWR to 60 MHz. Run 100 watts continuously, 1500 watts for 10 seconds SWR is 1.1:1 to 30 MHz, below 1.3:1 to 650 MHz. 3x3x7 inches.
C. MFJ-250, \$49.95. 1KW dummy load, 50 ohm oil-filled, low VSWR-400 MHz, 1KW CW or 2 KW PEP for 10 minutes. 1/2 KW for 20 minutes; with oil. 7 1/2x6 1/2x5 1/2 inches.
D. MFJ-704, \$39.95. Low pass filter handles full legal power. 1.8-30 MHz. 52 ohm, 100 insertion loss.

MFJ Multiple DC Power Outlets



A. MFJ-1118, \$64.95, High Current Multiple DC Outlet. Gives you two HF and/or VHF transceivers and six or more accessories from two power sources. These MFJ outlets have 12 VDC power supply. Two pairs of 30 amp binding posts, RF bypassed and individually fused for transceivers. Six additional pair of binding posts are fused and handle a total of 15 amps. ON/OFF power switch and LED power indicator. 0-25 V monitor meter. 6 feet, eight gauge cable with ring tongue terminals.
B. MFJ-1116, \$44.95, Deluxe Multiple DC Power Outlet. 8 outlets for powering accessories. Connects to 12 VDC power VDC power supply, monitors DC voltage with voltmeter, power switch and 15 amp fuse. 5-way binding post with standard spacing for dual banana jacks.
C. MFJ-1112, \$29.95, like MFJ-1116 without ON/OFF switch, voltmeter, and fuse. 6-pair outlets.

MFJ Mini Speaker/Mics and Compact Speaker/Mics

MFJ-285/287 These MFJ speaker/mics MFJ-284/286 **\$24.95** give you everything -- first rate electret mic element and wide range speaker for superb audio on both transmit and receive. Earphone jack, PTT, pocket clip, lightweight retractable cord and 1 year guarantee -- and you get it all in a tiny mini 2x1 1/4x1 1/4 inch package or compact 1 1/2x2x3 inches. Regular or "L" shaped connector available. Come by and try our Mini Mics: MFJ-283, 285, 285L, 285W. MFJ-287, 287L, our Compact Mics: MFJ-284 or 286 for ICOM, Yaesu, Alinco, Kenwood and others.

Free Catalogs at booths 62-64, 83-85

MFJ DXers' Clocks



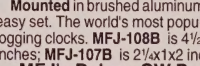
MFJ-112, \$24.95, World Map Clock. Push buttons let you move east and west on the map display to the time at any QTH throughout the world. Time display, hour/minute/second, week, month, year and day of the week. User selectable for 12 or 24-hour display formats.
MFJ-105B, \$19.95. An accurate 24-hour UTC quartz wall clock with large 10 inch face.

MFJ 12/24 Hour Clocks



MFJ-108B, \$19.95 Huge 1/2 inch old LCD digits let you see the time from anywhere in your shack. Choose from the dual clock that has UTC and local display or the single 24-hour ham clock.
Mounted in brushed aluminum frame, easy set. The world's most popular logging clocks. **MFJ-108B** is 4 1/4x1 1/2 inches. **MFJ-107B** is 2 1/4x1 1/2 inches.

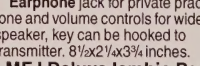
MFJ's Deluxe CW Practice Oscillator



MFJ-557 MFJ Deluxe Code Practice \$24.95 Oscillator has a Morse key and oscillator mounted together on a heavy steel base so it stays put on your table. Portable because it runs on a 9-volt battery (not included) or an AC adaptor (\$12.95) that plugs into a jack on the side.

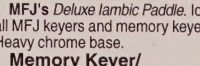
Earphone jack for private practice, tone and volume controls for wide range, speaker, key can be hooked to transmitter. 8 1/2x2 1/4x3 1/4 inches.

MFJ Deluxe Iambic Paddle

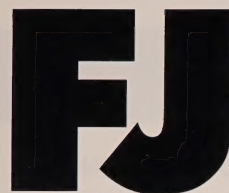


MFJ-564 \$49.95 MFJ's Deluxe Iambic Paddle. Ideal for all MFJ keyers and memory keyers. Heavy chrome base.

Memory Keyer/Bencher Combo



MFJ-490X, \$109.95, Keyer, same as MFJ-490 without bencher paddle.



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6551; Toll-free 800-647-1800

62-64, 83-85

MFJ SSB Transceiver



MFJ-9420
\$219.95
Take this tiny MFJ 20 Meter SSB Travel Radio™ with you and enjoy DXing and ragchewing wherever you go.

A high performance superhet receiver, razor sharp crystal filter, sensitivity down to noise, smooth vernier drive VFO, one watt of audio, speaker, real S-meter, rugged transmitter, 14.150-14.350 MHz coverage and low current drain. Tiny 2½"x6½"x1.12" watts output.

MFJ-415 CW module, \$39.95, operate CW. 14.000-14.100 MHz. Has semi break-in, sidetone, key jack, CW/SSB switch.

World Band Radio Kit



MFJ-8100K
\$59.95
MFJ-8100W
\$79.95
Build this regenerative shortwave receiver kit and listen to signals from all over the world with just a 10 foot wire antenna.

Has RF stage, vernier reduction drive, smooth regeneration, five bands.

MFJ CW Transceivers



MFJ-9020
\$179.95
Compact CW Transceivers, superhet receiver, crystal filter, RIT, AGC, vernier tuning, sidetone, speaker, semi/full break-in, up to 5 watts.

Models for 40, 30, 20, 17 and 15 Meters CW band, \$179.95 each.

MFJ Keyer/Paddle



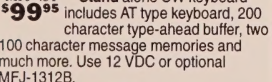
MFJ-422B
\$134.95
Deluxe MFJ Keyer/Bencher Paddle
Combo. Iambic keying, adjustable weight, tone, front panel volume, speed controls, dot-dash memories, sidetone, speaker and auto or semi-auto/tune modes. Use 9 V battery or 110 VAC with MFJ-1305, \$12.95. Keyer Only, order MFJ-422BX, \$79.95.

MFJ Keyer



MFJ-401B based MFJ-401B **\$49.95**
on the proven Curtis 80444ABM IC keyer chip lets you send iambic, automatic, semi-auto, or manual with your squeeze, single-lever or straight key. Dot-dash memories, 9 V bat. or 110 VAC with MFJ-1305, \$12.95, 4x2x3½".

MFJ Morse Keyboard



MFJ-451 Stand alone CW keyboard includes AT type keyboard, 200 character type-ahead buffer, two 100 character message memories and much more. Use 12 VDC or optional MFJ-1312B.

MFJ-451X, \$79.95, keyboard interface only.

Making quality affordable during the 1994 Hamvention

Here is the finest 3 KW Tuner money can buy. Has roller inductor, dummy load, new peak reading meter, antenna switch, balun plus more . . . \$349.95

MFJ-989C is not for everyone -- not everyone can afford it.

However, if you do make the investment you get the finest 3 KW PEP tuner money can buy -- one that will give you a lifetime of use, one that takes the fear out of high power operation and one that lets you get your SWR down to absolute minimum.

The MFJ-989C is a compact 3 KW PEP roller inductor tuner with a lighted peak and average reading dual range Cross-needle SWR/Wattmeter.

With three continuously variable components -- two massive 6 KV capacitors and a high inductance roller inductor -- you get



precise control over SWR and the widest matching range possible. It covers 1.8-30 MHz.

You get a new lighted peak and average reading Cross-needle SWR/Wattmeter.

You get a giant two core balun wound with Teflon® wire for balanced lines and a 6-position antenna switch with extra-heavy switch contacts.

The compact 10½"x4½"x1½" inch cabinet fits right into your station.

You get a 50 ohm 300 watt dummy load for tuning your exciter, a tilt stand for easy viewing and a 3 digits turns counter plus a spinner knob for precise inductance control.

MFJ-989C
\$349.95

2-Knob Differential-T™ Tuner



MFJ-986
\$289.95

MFJ-986
2-knob tuner uses a differential capacitor to make tuning foolproof and easier than ever. It ends constant retuning with ends broad band coverage and gives you minimum SWR at only one best setting. It covers 1.8-30 MHz.

The roller-inductor keeps your SWR at an absolute minimum. A 3-digit turn counter quickly returns to your favorite frequency.

You get a peak and average reading Cross-needle SWR/Wattmeter. It reads forward/reflected power in 200/50 and 2000/500 watt ranges. 8 position antenna switch and current balun. Meter lamp uses 12 VDC or 110 VAC with MFJ-1312, \$12.95.

MFJ Cross-needle Mobile Tuner

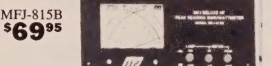


MFJ-945D
\$89.95
Don't leave home without this mobile tuner! Have an uninterrupted trip as the MFJ-945D extends your antennas bandwidth so you don't have to adjust and adjust your mobile whip.

You can operate anywhere in a band and get low SWR. You'll get maximum power out of your solid state or tube rig and it'll run cooler and last longer.

Smaller 8x2x6 inches. uses little room. Cross-needle SWR/Wattmeter and convenient placement of controls makes tuning fast and easy while in motion. 300 watts PEP output. Efficient air wound inductor. 1000 volt capacitors. Mobile mount, MFJ-20, \$3.00.

HF Cross-needle SWR/Wattmeter



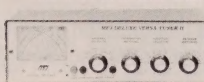
MFJ-815B
\$69.95
MFJ-815B wattmeter gives you a peak reading function! Shows SWR, forward and reflected power in 2000/500 and 200/50 watt ranges. 1.8-30 MHz. Mechanical zero adjusts for movement. Lamp uses 12 VDC or 110 VAC with MFJ-1312, \$12.95.

MFJ VHF SWR/Wattmeter



MFJ-812B
\$29.95
MFJ-812B is the world's most popular (and most affordable) VHF SWR/Wattmeter with built-in field strength meter. Covers 2 Meters and 220 MHz. Read forward and reflected power in 2 ranges (30 or 300 watts). Read SWR from 14 MHz thru 220 MHz. Also reads relative field strength from 1 to 220 MHz. Has binding post for field strength antenna. 2-color meter. 4½"x2½"x3. inches.

MFJ's New 300 Watt Tuner

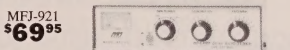


MFJ-921
\$69.95

If you don't need a dummy load but want all the other features of the MFJ-949E, then choose the MFJ-948.

Features a peak reading lighted Cross-needle meter with built-in lamp switch, 1 year unconditional guarantee and is made here in the USA. Get yours today for only . . . \$129.95.

MFJ VHF or UHF Tuners



MFJ-921 tuner covers both 2 Meters and the 220 MHz bands. MFJ-924 covers 440 MHz. Built-in SWR/Wattmeter. 8x2½"x3 inches. 2-knob tuning convenient for mobile or base.

MFJ Color FAX Interface



MFJ-1214PC
\$149.95
Use your computer and radio to receive and display brilliant full color FAX news photos and incredible WeFAX weather maps with all 16 gray levels.

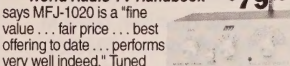
Animate weather maps. Display 10 global pictures simultaneously. Zoom any part of picture or map. Frequency manager lists over 900 FAX stations. Automatic picture capture and save.

Includes interface, easy-to-use menu driven software, cables, power supply, comprehensive manual and Jump Start™ guide. Requires 286 or better computer with VGA monitor.

MFJ MultiReader™
Copy RTTY, ASCII, CW and AMTOR. Self-contained, no computer needed.

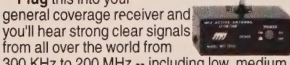
MFJ-462
\$149.95
Connects to shortwave receiver earphone jack. Has 2 lines 16 character LCD display. Built-in printer port. Uses 12 VDC or 110 VAC with optional MFJ-1312B, \$12.95.

Indoor Active Antenna



MFJ-1020 is a "fine value . . . fair price . . . best offering to date . . . performs very well indeed." Tuned circuitry minimizes intermod., improves selectivity, reduces noise outside tuned band. Use as pre-selector with ext. antenna. Covers 0.3-30 MHz. Has Tune, Band, Gain, On/Off/Bypass Controls. Detachable telescoping whip. 5x2x6 in. 9 V bat., 9-18 VDC or 110 VAC with MFJ-1312, \$12.95.

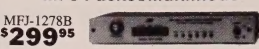
MFJ Active Antenna



MFJ-1022
\$39.95
Plug this into your general coverage receiver and you'll hear strong clear signals from all over the world from 300 KHz to 20 MHz -- including low, medium, shortwave and VHF bands.

Detachable 20 in. telescoping antenna. 9 volt battery or 110 VAC with MFJ-1312B, \$12.95, 3½"x1½"x4 inches.

MFJ Packet/Multimode



MFJ-1278B
\$299.95

NEW 10-Mode Data Controller. Built-in PACTOR, Color SSTV, Color FAX, HF/VHF packet, AMTOR, RTTY, ASCII, CW, Navtex and contest memory keyer. Built-in 16 gray levels modem, 64K memory battery back-up RAM -- expandable to 512K. Enhanced packet mailbox, FREE AC adaptor, KISS interface for TCP/IP -- MYSYS compatible, Host Mode, fast through-put anti-collision technology for packet. True DCC circuit for HF, FSK Output, Automatic Signal Analysis for HF packet/RTTY/ASCII/AMTOR, built-in printer port, dual radio ports, RS-232 & TTL serial ports, sidetone amplifier, independent transmit audio level for each radio port, TAPR internal modem header for high speed modem -- 2400 or 9600 baud. 20-digit LED tuning indicator, dedicated MARS mode, CW Iambic paddle input, IC sockets used throughout. Fast-Start™ manual, 1 year No Matter What™ guarantee.

TNCs for VHF/HF Packet



MFJ-1270C
\$119.95

MFJ-1270C Super TAPR Clone known worldwide as the most reliable TNC. Thousands are used as digipeaters, nodes, BBS -- many in 24 hours per day applications for years without a failure. VHF and HF Packet. Free AC power supply, WeFAX, mailbox expandable to 512K. Easy upgrade to 2400 or 9600 baud. Host Mode, KISS interface. 1 year No Matter What™ guarantee. Uses 12 VDC or 110 VAC.

MFJ-1274C, like MFJ-1270C but with 20 segment tuning indicator for HF packet.

MFJ Packet Software

MFJ-1289, \$59.95, MultiCom™. Exciting new 1278 software, bursting with features for IBM and compatibles: Gray level FAX, Color SSTV, VGA Packet Picture, RS-232 cable and much more.

MFJ-1282B, \$39.95, MultiCom64™. Starter Pack for C64/128. **MFJ-1287B, \$59.95, MacMultiCom™.** Starter Pack for Macintosh.

MFJ TNC/MC Switch



MFJ-1272B
\$34.95

MFJ-1272B lets you switch between your TNC and MC by pushing a button! You won't have to unplug your microphone and plug in your TNC every time you want to work packet. Just plug the TNC switch with pre-wired cable into your rig's microphone connector and into your TNC and you're ready to go -- no more hunting for hard-to-find connectors and wiring up complicated cables. Compatible with most radios with 8-pin MC or most radios with 8-pin RJ-45 modular jack. Switch for MFJ TNCs, \$34.95 each. For other TNCs, \$39.95 each.

Prices and specifications subject to change without notice or obligation. Add shipping and handling charges. © 1994 MFJ Enterprises, Inc.

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Forums continued

- 9:00 - 10:30** **ARES (SESSION #12)**..... **ROOM 2**
Moderator: Larry Solak, WD8MPV
Speakers: "Section Perspective", David Kersten, N8AUH, Ohio Section Manager
 "Support & Growth", Joanne Solak, KJ3O, Ohio Affiliated Club Coordinator
- 9:00 - 11:00** **WX SATELLITE (SESSION #13)**.....**ROOM 3**
Moderator: Dave Latsch, N9MCE
Speakers: "Weather Satellite Overview", Jeff Wallach, N5ITU
 "HRPT-Amateur Reception", John DuBois, W1HDX
 "Image Interpretation of Weather Satellite Photos", Charles Judge
 "Software for Weather Satellite Reception", Tracy Lenocker
- 9:00 - 10:30** **COMBINED MARS (SESSION #14)**.....**ROOM 4**
Moderator: Dave Vittum, Chief, Navy-Marine Corps MARS
Keynote Speaker: RADM Lewis Felton, SPAWARS, Washington, D.C.
Speakers: Mr. Ray Collins, AGA3C, Chief, Air Force MARS
 Mr. Robert L. Sutton, AAA9A, Chief, Army MARS
- 10:00 - 11:00** **ELECTRICAL SAFETY DEMONSTRATION (SESSION #16)**.....**ROOM 6**
Moderator: George Maurer and Tony Norman, Dayton Power & Light
- 10:00 - 10:45** **GERITOL NET (SESSION #17)****ROOM 7**
Moderator: Harvey Frye, AA4HF
Speakers: "Endorsement Procedures and Status Contests", H. W. Frank, NN8P
 "Antennas for Results", John Ciaccia, WMØG
 "Net Activities", Dave Ertel, KJ8V
- 10:45 - 11:30** **OSSBN (SESSION #19)**.....**ROOM 2**
Speaker: Michael J. Mettler, WB8MZZ
- 10:45 - 12:45** **YOUTH IN AMATEUR RADIO (SESSION #21)****ROOM 4**
Moderator: Carole Perry, WB2MGP
Guests: Roy Neal, K6DUE, Chris Lougee, N7TJM, Gordon West, WB6NOA
Speakers: Seth Wilson, NØURQ Age 14
 Lee De Shield, KD4QBW Age 16
 Cathy Gilliland, KBØFDU Age 16
 Shawn Pattison, KD4WXY Age 13
 Cody Haley, KB5WYJ Age 11
 Casey Haley, KB5UEO Age 9
 Chris Rismiller, N8PEM Age 18
 Laura Sobon, KD4OZC Age 10
 Ray Glazer, AA8MR Age 16
 Toby Metz, KB7UIM Age 14
 Kevin Sill, N9RPL Age 15

An ICOM radio will be donated to a lucky child in the audience. There will be lots of other surprises! Each child will speak about his or her own area of "expertise".

- 11:00 - 11:45** OHIO ARMY MARS (SESSION #18) ROOM 7
Moderator: John Bracken, AAA5OH/KA8CZA
- 11:15 - 12:00** 10-10 INTERNATIONAL (SESSION #20) ROOM 3
Moderator: Hugh Sullivan, WA4QZU
- 11:45 - 12:45** YLRL (SESSION #22) ROOM 2
Moderator: Christine Haycock, WB2YBA
Speakers: "The History of the Founding of YLRL and Early YL Hams", Ethel Smith, K4LMB
 "Current YL Activities, Nets, Contests, Etc.", Kay Eyman, WA0WOF
 "The Perils of Christine and Her Antennas", Christine Haycock, WB2YBA
- 12:15 - 2:30** SLOW SCAN TV (SESSION #23) ROOM 3
Moderator: Dr. Don C. Miller, W9NTP
Speakers: "This High Performance Flexible SSTV/FAX System is Free", Ben Vester, K3BC
 "The Latest Developments in SSTV Covering the DSP TSC-100, The JA Mode, SSTV Noise Reducer, and Simultaneous SSTV and Voice",
 Izumi Soma, KH6JDU/JA1KZS
 "Slide Show and Evaluation of SSTV Modes From Down Under (Australia)",
 John Wilson, VK3LM
 "Early History of SSTV as Viewed from the United Kingdom", Grant Dixon, G8CGK
- 1:00 - 2:30** FIREBIRDS (SESSION #29) ROOM 2
Moderator: Wallace G. Renn, WB8M
Speaker: Brooks Grooms, N9AZK
- 1:30 - 5:00** CONTEST (SESSION #31) ROOM 1
Moderators: Doug Grant, K1DG and Charlie Morrison, WZ1R
Speakers: "Building a World-Class Multi-Multi Station in the Pacific Northwest - AGAIN!",
 Rush Drake, W7RM
 "Two Guys, Two Rigs, and a QSO Every 8 Seconds - the 1993 CQWW SSB at P4ØL"
 Jeff Steinman, KRØY and Ralph Bowen, N5RZ
 "The KN8Z Contest Station - Fort Sheller, Ohio", J. R. "Doc" Sheller, KN8Z
 "Contesting in the Black Hole", Bill Straw, WBØO
 "Genetic Engineering in Station Design - How I Cloned the K1EA Superstation"
 Matt Strelow, KC1XX and Ken Wolff, K1EA
 "GØKPW - the Stealth Multi-Multi in the U. K.", Dave Lawley, G4BUO
 "In Search of the Truly Unique Contest QSO - Log-Checking in the CQWW"
 Bob Cox, K3EST and Dick Norton, N6AA
- 1:00 - 3:00** MIDCARS (SESSION #24) ROOM 4
Moderator: Carl Lamonica, Sr., KA9V
Speakers: "The New MidCars and the Old MidCars", Russ Hart, Jr., K8BMN
 "MidCars and the Other Emergency Services", Tom Romstadt, W9NIC
- 1:00 - 2:00** ELECTRICAL SAFETY DEMONSTRATION (SESSION #26) ROOM 6
Moderator: George Maurer and Tony Norman, Dayton Power & Light

Forums continued

- 1:15 - 2:45** **AMPLITUDE MODULATION (SESSION #27)**.....ROOM 7
Moderator: Dale Gagnon, KW1I
Speakers: "AM International - First Anniversary Update"
 "Classic Radio Museums - Photo Review"
 "AM Issue Panel Discussion", Don Chester, K4KYV
- 1:45 - 3:15** **SAREX 10th ANNIVERSARY FORUM (SESSION #25)**.....ROOM 5
 Shuttle Amateur Radio Experiment (SAREX)
 10th Anniversary Reflections and Visions for the Future
Moderator: Roy Neal, K6DUE
Astronaut Panel Session: "SAREX, A View from Space"
Astronaut Panel Members: Anthony W. (Tony) England, WØORE, Mission Specialist, STS-51F
 Steven R. Nagel, N5RAW, Pilot, STS-61A, Commander, STS-37,
 Commander, STS-55
 William S. McArthur, Jr., KC5ACR, Mission Specialist, STS-58
SAREX Working Group Presentation: "SAREX Reflections, Current Status, and
 Future Visions"
Presenters: Roy Neal, K6DUE, SAREX Working Group Lead
 Rosalie White, WA1STO, ARRL Education Activities Division, SAREX Working Group
 Frank H. Bauer, KA3HDO, AMSAT, VP for Manned Space Programs, SAREX Working
 Group
 Lou McFadin, W5DID, SAREX Principal Investigator, SAREX Working Group
 John Nickel, WD5EEV, AMSAT Assistant to the VP for Manned Space Programs
 Doug Loughmiller, GØSYX/KO5I, AMSAT Past President
 Bill Tynan, W3XO, AMSAT-NA President, Past Member, SAREX Working Group
Education Panel Session: "SAREX: A View from the Classroom"
Panel Members: Stephen W. Morton, AA8HH, Seven Hills Schools/Lotspeich Elementary
 Coordinator
 Casey J. Morton, AA8MC, Student, Lotspeich Elementary
 Charles R. Sufana, AJ9N, Ernest Elliott School Coordinator
 Julie Sufana, Student, Ernest Elliott School
- 2:45-5:00** **HAM NEWS AND VIEWS FROM AROUND THE WORLD (SESSION #30)**.....ROOM 2
Moderator: Jim Davis, KU8R, "Newsline"
Speakers: "This Week in Amateur Radio", Albany, N.Y., George Bowen, N2LQS, Co-Producer
 "Radio Amateur Information Network", Chicago, IL., Hap Holly, KC9RP, Producer
 "Spectrum", Metuchen, N. J., Dave Marthouse, N2AAM, Producer/Host
 "New Zealand's Print Disabled Radio and NZART Bulletin Services", Jim Meachen,
 ZL2BHF, President NZART and Producer/Host
 Bill Pasternak, WA6ITF, Network Director "Newsline", Los Angeles, CA.
 Len Winkler, KB7LPW, Producer/Host "Ham Radio and More", KFNN-AM, Phoenix, AZ.
 "South Africa AMSAT News Service", Hans van der Gronnendaal, ZS6AKV, President
 South Africa AMSAT
 Radio Society of Great Britain-GB2RS Bulletin Services, Peter E. Chadwick, G3RZP

- 2:45 - 5:00** AMATEUR TV (Fast Scan ATV) (SESSION #31) ROOM 3
Moderators: Tom O'Hara, W6ORG
Speakers: "Features of an Expanded ATV Repeater System", Ken Morris, WA8RUT and Bill Parker, W8DMR
 "The Most Asked ATV Questions Plus Yours", Tom O'Hara, W6ORG
- 3:00 - 4:00** ELECTRICAL SAFETY DEMONSTRATION (SESSION #34).....ROOM 6
Moderator: George Maurer and Tony Norman, Dayton Power & Light
- 3:00 - 5:00** REPEATER INTERFERENCE (SESSION #35).....ROOM 7
Moderator: Ken Enenbach, KCØWX, Mid-America Coordination Council, Inc., President
Speakers: Dave Shiple, AC4MU, President of SERA
 Don Moser, AA7Y, Motron Electronics
 Phil Ferrell, K7PF, Electronic Engineer
 Gary Hendrickson, W3DTN, Middle Atlantic Repeater Council
- 3:15 - 5:00** QRP EXPEDITIONS (SESSION #32) ROOM 4
Moderator: Paula Franke, WB9TBU
Speakers: "AA2U/P4ØC-- DX/Contest QRP Expeditions", Randy Rand, AA2U
- 3:15 - 5:00** AMSAT(SESSION #33).....ROOM 5
Moderator: Keith Baker, KB1SF
Speakers: "Welcome", Bill Tynan, W3XO, President, AMSAT, North America
 "Phase 3-D, The Satellite for All Amateurs!"
 Dick Jansson, WD4FAB, V.P. Engineering AMSAT, North America
 "AMSAT-UK Participation in the Phase 3-D Project"
 Ron Broadbent, G3AAJ, Honorable Secretary, AMSAT-United Kingdom
 "The Simplicity of Mode S", Ed Krome, KA9LNV

Sunday Forums

- 9:30 - 11:00** THE ANNUAL DAYTON MEDIA FORUM (SESSION #36).....ROOM 1
Moderator: Bill Pasternak, WA6ITF, "NEWSLINE"
Speakers: "Public Relations and the ARRL", ARRL Information Manager, Steve Mansfield, N1MZA
 "Ham Radio Public Relations in the New York City Marathon", Steve Mendelsohn, WA2DHF, ARRL Hudson Division Director
 "Writing Good Public Relations Ad Copy and Allied Subjects", Joe Schroeder, W9JUV
 "Use of Television in Public Relations", Keith Glispie, WA6TFD, KTTV-Fox Television, Los Angeles
- 9:30 - 11:00** BICYCLE MOBILE HAMS OF AMERICA (SESSION #37) ROOM 2
Moderator: Mike Nickolaus, NFØN
Speakers: "Hams and the Great Bicycle Ride", Chris Charron, WBØRSW
 "RAGBRAI"
 "Biking Michigan's East Shoreline", Jim Kortge, NU8N
 "The QRP Pedaling Machine", Elroy Shelley, WB9GIE

- 9:30 - 11:00** QRP-THOSE NEW CLUBS (SESSION #38) ROOM 3
Moderator: Jim Fitton, W1FMR
Speakers: "Technical Interest", Chuck Adams, K5FO
 "Newsletters are Necessary", Doug Hendricks, KI6DS
- 9:30 - 11:00** AUDIO FORUM (SESSION #39) ROOM 4
Moderator: Ken "Mr. Audio" Glanzer, K7GCO
 "The Audio Advantage for Receiving and Transmitting"
- 9:30 - 10:30** FCC (SESSION #40) ROOM 5
Moderators: John Johnston, W3BE and William T. Cross, AA3DI
- 10:00 - 11:00** ELECTRICAL SAFETY DEMONSTRATION (SESSION #41) ROOM 6
Moderator: George Maurer and Tony Norman, Dayton Power & Light
- 11:00 - 12:30** ARRL FORUM (SESSION #47) ROOM 5
Moderator: Allan Severson, AB8P, Director Great Lakes Division
Speakers: George Wilson, W4OYI, President of ARRL
 George Race, WB8BGY, Vice Director, Great Lakes Division
 David Sumner, K1ZZ, Executive President of ARRL
 David Kersten, N8AUH, Ohio Section Manager
- 11:15 - 1:00** DIGITAL DIGEST (SESSION #43) ROOM 1
Moderator: Dale Sinner, W6IWO
Speakers: "Using the New G-TOR Mode", Phil Anderson, WØXI, President of Kantronics
 "Using PACTOR II, the Upgraded Version of PACTOR", Peter Helpert, DL6MAA
 "Using CLOVER Mode Data Compression", Peter Schulze, TY1PS
- 11:15 - 1:00** STATION GROUNDING FOR LIGHTNING PROTECTION (SESSION #44) ROOM 2
Moderator: Ken Rand, KF4MT
- 11:15 - 1:00** AMATEUR RADIO AND THE LAW (SESSION #45) ROOM 3
Moderator: James O'Connell, W9WU
- 11:15 - 1:00** ANARC/SCANNER/SHORTWAVE LISTENERS (SESSION #46) ROOM 4
Moderator: Mike Schulsinger, N8QHV
Speakers: "New Products", Bob Grove, WA4PYQ, Grove Enterprises Inc.
 "Computers and Radio", Bill Grove, Grove Enterprises Inc.
 "Utilities Monitoring", Larry Van Horn, N5FPW, Grove Enterprises Inc.
 "The Drake SW-8 Communications Receiver", Steve Whitefield and John Anthony,
 R. L. Drake Co.
 "Aircraft Communications and Reporting System" (ACARS),
 Fred Osterman, N8EKU, Universal Radio Inc.
 "Natural ELF Emissions", David Schneider, Ph.D., AD4CC,
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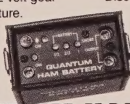
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- Bandpass Tuning
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Friday

7:30-10:30 — PREAMP/CONVERTER NOISE FIGURE MEASUREMENTS

Sponsored by the Midwest VHF/UHF Society

Measurements will be made in the area adjacent to Forum Room 3 in the Hara Conference Center. Measurements will be performed from 144 thru 1296 MHz. Door prizes for top Homebrew entries. Measurements conducted by: Bob French, N8EHA and members of the Midwest VHF/UHF Society.

Sunday

8:30-1:00 — VHF/UHF ANTENNA GAIN MEASUREMENTS (Meadowdale High School)

Sponsored by the Midwest VHF/UHF Society

Find out the "real" gain of your 144, 432, and 1296 MHz antennas. Homebrew and commercial category for each band. Prizes will be awarded. NOTE: Free shuttle bus service runs frequently from Hara Arena to nearby Meadowdale High School track/football field.

Measurement Team: Bruce Lundy, KA8EDE, Gerd Schrick, WB8IFM and Members of the Midwest VHF/UHF Society



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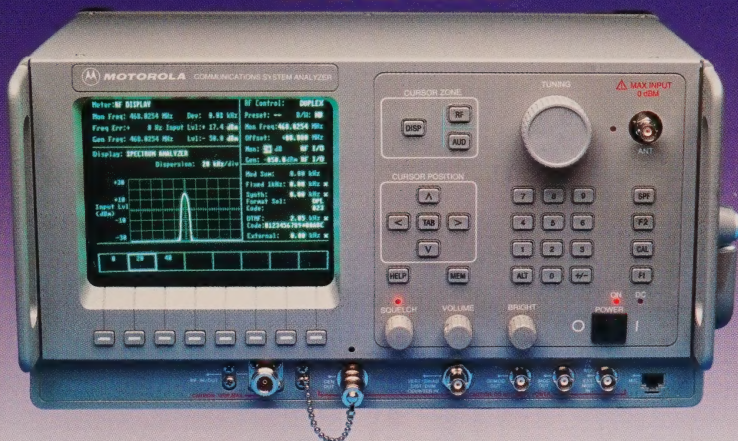
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Windowed displays, soft key menus, and "Help" screens give unmatched user friendliness and flexibility.

See & Hear™ spectrum analyzer lets you view the RF spectrum while hearing the modulation and measuring the received carrier data.

Duplex generator, with fully adjustable and calibrated output, lets you service repeaters and full duplex radios.

Large (7" diagonal) CRT allows simultaneous viewing of graphics, digital data, and test conditions.

Automatic scanning of up to 20 user entered frequency presets. Locate and identify activity and measure data, such as PL/DPL codes.

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MOTOROLA

1994 Hamvention Forum Schedule

FRIDAY – APRIL 29							
TIME	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7
1:00 p.m.							
2:00 p.m.	AMSAT 1:00-2:45	Ham Radio in the Classroom 1:00-3:00	Alternate Activities "Make-it & Take it" Free 1:00-4:00 (See Separate Schedule for Saturday and Sunday Activities)	Packet Radio 1:00-4:45	Antennas 1:00-4:45	Electrical Safety Demonstration 2:00-3:00	International Hungarian Amateur Radio Club 1:00-3:00
3:00 p.m.							
4:00 p.m.	County Hunters 3:00-4:45	QRP Radio Construction 3:15-4:45					Operating Techniques for the New or Inexperienced Ham 3:15-4:45
5:00 p.m.							

SATURDAY – APRIL 30							
TIME	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7
9:00 a.m.							
10:00 a.m.		ARES 9:00-10:30	WX Satellite 9:00-11:00	Combined MARS 9:00-10:30			
11:00 a.m.	DX 9:00-1:00	OSSBN 10:45-11:30			VHF/UHF Microwave Forum 8:30-1:30	Electrical Safety Demonstration 10:00-11:00	GERITOL Net 10:00-10:45
12:00 a.m.		YLRL 11:45-12:45	10 –10 International 11:15-12:00	Youth in Amateur Radio 10:45-12:45			Ohio Army MARS 11:00-11:45
1:00 p.m.			Slow Scan TV 12:15-2:30				
2:00 p.m.		Firebirds 1:00-2:30		MIDCARS 1:00-3:00		Electrical Safety Demonstration 1:00-2:00	Amplitude Modulation International 1:15-2:45
3:00 p.m.					SAREX 1:45-3:15		
4:00 p.m.	Contest 1:30-5:00	Ham News and Views from Around the World 2:45-5:00	Amateur TV (Fast Scan ATV) 2:45-5:00	QRP Expeditions 3:15-5:00	AMSAT 3:15-5:00	Electrical Safety Demonstration 3:00-4:00	Repeater Interference 3:00-5:00
5:00 p.m.							

SUNDAY – MAY 1							
TIME	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7
10:00 a.m.	The Annual Media Forum 9:30 -11:00	Bicycle Mobile Hams of America 9:30 -11:00	QRP - Those New Clubs 9:30 -11:00	Audio Forum 9:30 -11:00	FCC 9:30 -10:30		
11:00 a.m.						Electrical Safety Demonstration 10:00 -11:00	
12:00 p.m.	Digital Digest 11:15 -1:00	Station Grounding for Lightning Protection 11:15 -1:00	Amateur Radio & the Law 11:15 -1:00	ANARC Scanner/Shortwave Listeners 11:15 -1:00	ARRL Forum 11:00 -12:30		
1:00 p.m.							

1994 Hamvention Forums Schedule

Alternate Activities ...

Hamvention Ticket Required

We'd like to welcome everyone to join us for interesting lectures, collectable crafts and other recreational activities. See page 49 for schedule.

Friday afternoon 1:00 p.m. - 4:00 p.m. at Hara Arena
Free Make-It and Take-It Craft session.

Saturday 9:00 a.m. to Noon and 2:00 p.m. to 4:00 p.m. and Sunday 9:00 a.m. to Noon at Meadowdale High School. Participate in a variety of craft classes, lectures and bingo. Alternate Activities Luncheons also available on Saturday and Sunday.

Shuttle bus service from Hara Arena is provided on Saturday and Sunday.

Hara Arena

Friday, April 29 1:00 - 4:00 p.m.
Make It & Take It Room 3

Meadowdale High School

Saturday, April 30 9 a.m. to 12 Noon - 2 to 4 p.m.

Sunday, May 1 9 a.m. - 12 Noon

See Listing on Page 49.

Luncheons at Meadowdale H. S.

Saturday, April 30 Noon \$8.50 Each

Chicken with potatoes: On the side you have for your dining pleasure, red and green chili sauce and Monterey Jack cheese. It is a Southwestern dish. Mixed green salad with fresh herbs and vinaigrette dressing, cornsticks and dill rolls with butter, chocolate mint glaze over yellow cake garnished with mint leaves, coffee, hot tea, ice tea or milk.

Door Prize Drawings - In Cafeteria following luncheon. You must be present to win. Luncheon ticket is used for this prize drawing.

Sunday, May 1 Noon \$8.00 Each

Cup of cold Gaspacho soup, hot turkey salad with fresh vegetable sticks and dip, cookies, coffee, tea or milk.

Door Prize Drawings - In Cafeteria following luncheon. You must be present to win. Luncheon ticket is used for this prize drawing.

1:30 p.m. Return to Hara Arena

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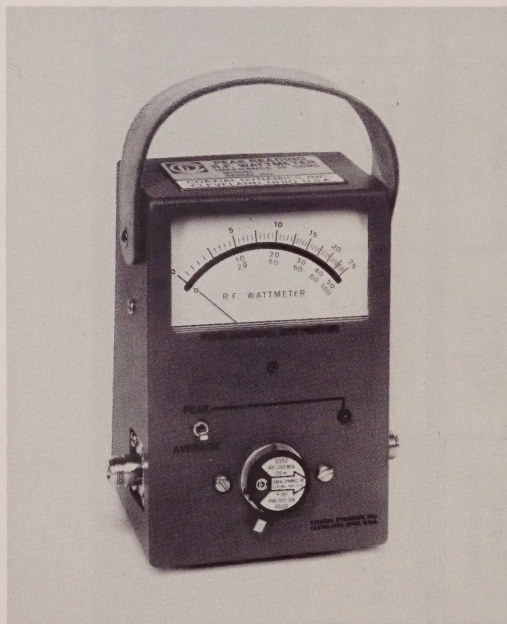
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1994 Alternate Activities Schedule - Meadowdale High School

SATURDAY - APRIL 30		SUNDAY - MAY 1	
9:00 - 10:30	10:30 - 12:00	9:00 - 10:30	10:30 - 12:00
Teddy Bear with Chair ROOM 1 \$4.00	Teddy Bear with Chair ROOM 1 \$4.00	Spring Wreath ROOM 1 \$1.00	Heart Basket ROOM 1 \$1.00
Stained Glass in a Hoop ROOM 4 \$1.00	Decorate Your Own Canvas Shoes or Cap ROOM 4 No Charge	Speaker Info to come Room 6 No charge	Speaker Room 6 No charge
Braided Cord Bead Necklace ROOM 5 \$1.00	Dream Catcher ROOM 5 \$3.00		Black Sweatshirt with Gold Lame' ROOM 3 \$2.00
Dream Catcher Room 5 \$3.00	Learn Country Line Dancing Activity Room No Charge		Muslin Rag Doll ROOM 2 \$3.00
Speaker Room 6 No Charge	Friendly Plastic Jewelry ROOM 3 \$1.00		
	Rag Basket ROOM 2 \$4.00		
	Small Fringed Leather Bag ROOM 7 \$8.00		

Luncheon and Door Prizes.
You must be present to win!

Luncheon and Door Prizes.
You must be present to win!

Program subject to change without notice

The IC-Δ100H Takes The Magic Beyond 3 Wishes!

Exclusive Triple Band Capability

- ▲ Three independent band units for 2 M, 440 MHz and 1.2 GHz operation (simultaneous receive).
- ▲ Three independent displays can freely select the desired band unit.
- ▲ Each display indicates S/R/E, volume and squelch levels.
- ▲ Each display is controlled by a separate volume and tuning knob.
- ▲ Select from 3 external speaker jacks.

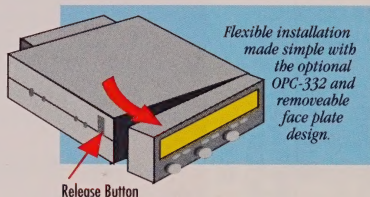
8 POSSIBLE COMBINATIONS!

#1	#2	#3
2M	440 MHz	1.2 GHz
2M	440 MHz	440 MHz
2M	2M	1.2 GHz
2M	2M	440 MHz
440 MHz	440 MHz	1.2 GHz
440 MHz	440 MHz	440 MHz
440 MHz	2M	1.2 GHz
440 MHz	2M	440 MHz

More than a tri-band radio, the IC-Δ100H gives you true freedom of choice!

- ▲ No removal or installation of additional band units required.
- ▲ Each operating band has a separate antenna connector to enable duplex/triplexer use without any mismatching antenna loss (not one common antenna for multi-signal, one band operation like you see in competitive models).

- ▲ Cross band double duplex (transmit on one band while receiving on two others) and full crossband duplex (transmit on one band and receive on another) is possible. The one-touch PTT enables telephone-like conversations without having to continually press PTT.



Remote Installation Options

- ▲ **One Body** – install as a complete unit.
- ▲ **Separate** – detach the front panel and mount each separately (see illustration).
- ▲ **Remote** – Mount the main body in the trunk (OPC-333 and OPC-335 req.).

Incredible Performance

- ▲ AFC-RIT, AFC-VXO, manual RIT and manual VXO modes to compensate for "off frequency" of the Tx station (1.2 GHz).
- ▲ High Sensitivity – less than .16μV.
- ▲ Double-conversion superhetrodyne receiver system.
- ▲ More than 2.4 W audio output power.

Memory Bank System

- ▲ 642 memory channels organized in two separate banks* (very convenient for two ham families).

MEMORY BANK SYSTEM						
Options	Bank/User #1			Bank/User #2		
Bank	#1	#2	#3	#1	#2	#3
Normal*	100	100	100	100	100	100
Scan Edge	6	6	6	6	6	6
Call	1	1	1	1	1	1
Total IC-Δ100H Memory Channels:						642

The memory bank system can even be customized for "bis" and "bers" operation!

- ▲ **Priority Watch** – Scans one (or more) memory channels per band while operating on a VFO frequency.
- ▲ **Transfer call or memory channel contents to VFO.** Particularly useful when searching for signals around a memory channel frequency and for recalling the offset frequency, tone frequency, etc.
- ▲ **14 DTMF autodial memories** for autopatching, accessing repeaters and controlling other equipment, etc.

* Stores operating frequency, duplex direction, offset frequency, subaudible tone frequency, encode on/off, tone squelch on/off and skip information.

Microphone Remote Controls

- ▲ A multi-function keyboard with complete control over the IC-Δ100H.
- ▲ The beep tones for each band are different and distinguishable so you can keep your eyes on the road.

- ▲ Over 22 functions are at

your fingertips with the IC-Δ100's unique microphone keyboard (see chart above)!

You Can Control All Of These Functions From The Microphone Keyboard!

☒ Power On/Off ☒ Select Main Band ☒ Change Operating Band ☒ Volume Adjust ☒ Squelch Adjust ☒ Mode Select ☒ Duplex Select ☒ Frequency Select ☒ Memory Channel Select ☒ Mute Bands ☒ Scan or Priority Watch ☒ Pager On/Off	☒ Code Squelch ☒ Tone, Tone Squelch ☒ Pocket Beep On/Off ☒ AFC On/Off ☒ Attenuator On/Off ☒ Set Mode ☒ DTMF Auto or Manual ☒ Operating Freq. Annc. (with opt. UT-66 synth.) ☒ Write VFO Contents to Memory or Call Channel ☒ Lock All Mic Keys or Keyboard Only
---	--

Other Great Features

- External remote control via another transceiver (UT-55 required)
- Tri, dual or mono band operation
- Sub band access/mute/busy beep functions
- Optional pocket beep and tone squelch
- Opt. pager/code squelch
- Tone encoder built in
- Multiple scans

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IC-Δ100H Triple Band Mobile Transceiver (shown with the optional OPC-332)



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(2 M mobile transceiver with 440 MHz receive!)

**BONUS
RECEIVE
BAND!**

New Exciting Features!

Bonus Receive Band – The 430 (440) MHz bonus band is available for receive. Enables full duplex, crossband operation between the 2 M and 70 cm bands. Crossband repeat from 440 MHz to 2 M.

Scratch Pad Memories – 10 scratch pad memories automatically store your 10 previously transmitted frequencies (5 simplex and 5 duplex) for instant recall. No fumbling around trying to write down, or store into regular memories, frequencies which you want to use temporarily.

Memory Allocation Function – 60 regular memory channels can be divided between the main and bonus band. You can organize your memories for maximum efficiency and listening preference.

Automatic Memory Channel Advance – After a memory channel is programmed, the channel indicator automatically advances, speeding up the programming process.

Tone Scan* – Scans, detects *and sets* the subaudible tone. Permits access to a repeater when you don't know the tone frequency.

* Optional UT-85 required.

Voice Synthesizer* – The IC-281H announces the operating frequency, enabling quick confirmation without taking your eyes off the road. Very helpful for visually impaired operators, too.

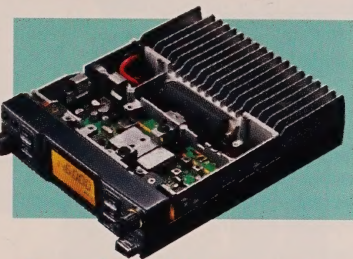
* Optional UT-66 required.

Packet "Plug and Play" Operation

Data Jack – Connects a TNC directly to the modulation circuit for packet convenience.

9600 BPS Capability – No modifications necessary. Provides higher performance packet operations.

Modulation Circuit – Newly designed, prevents over modulation even during high data throughput.



Rugged, Durable Construction

Die Cast Aluminum Frame Construction – Meets the highest standards to provide reliability and long life. Will enhance your trade-in value years later.

Large Heat Sink – Dissipates the heat to maintain power output and stability characteristics.

Simple Operation

Remote Control Microphone – Puts the operation of several functions at your fingertips.

Auto Dialing Capability – Programs 14 telephone numbers for autodial via repeater autopatch.

"One Push" Action Switches – Eliminates the need for "two step" function switch operation. Simplifies mobile operations for convenience and safety.

Large Display – Easy to see and logically organized for easy interpretation.

Auto Power Off – Shuts the transceiver down (when programmed). Great for bedside use.

Compatible Accessories – For easy mounting and operation.

And More!

- Built-in Pager and Code Squelch
- Optional Tone Squelch and Pocket Beep
- Scanning

This device has not been approved by the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained.



IC-281H 144 MHz
FM Transceiver

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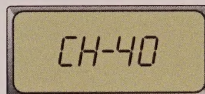
The IC-2GXAT offers surprisingly simple operation with the features and performance amateurs have come to expect from Icom products. Whether you're a beginner or a seasoned veteran, you'll quickly fall in love with this 2 meter handheld.

IC-2GXAT
2 Meter
FM Transceiver



SIMPLE OPERATION

Channel Operation – display can be set to indicate memory channel numbers only. This keeps frequencies secret, restricts operating frequencies or simplifies operation for an unfamiliar user.



Auto Repeater Operation – automatically activates the correct duplex direction when the receiver frequency tuned is within the repeater output frequency range.

Tone Scan – scans for, detects and sets the subaudible tone frequency to enable communication with another station that is using subaudible tones.

DTMF Redial – for quick and easy access to autopatches.

User Friendly Keyboard – uncluttered, user-friendly design for ease of operation.

ADVANCED FEATURES

Power Saver – reduces the current drain to 35 mA (avg. Rx) for battery conservation and extended operating time.

Low Power Option – switch to 1 W output power to extend your operating time when high power isn't required.

40 Memory Channels – store all repeater information independently.

Memory Transfer – the contents of a memory channel are transferred into VFO, and the **VFO mode is automatically selected**, to assure quick and easy QSY'ing.

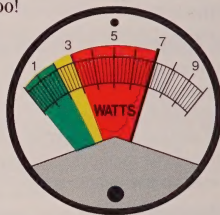
5 DTMF Auto Dial Memories – for quick and easy autopatching to frequently used telephone numbers.

Selectable DTMF Autodial Digit Duration – adjust your DTMF speed to the decode capabilities of the repeater.

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MAXIMUM POWER

7 W Output Power – one of the highest powers available in a handheld (nominal with 13.5 V DC or the optional BP-132A battery pack). The BP-132A battery pack provides more than enough power to reach those fringe areas, and a long lasting 600 mAh too!



DURABLE CONSTRUCTION

Die-cast Aluminum Rear Case – will withstand the demands of rugged outdoor use.

Splash Resistant Body – maintains performance in harsh outdoor environments.



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- Optional pager and code squelch
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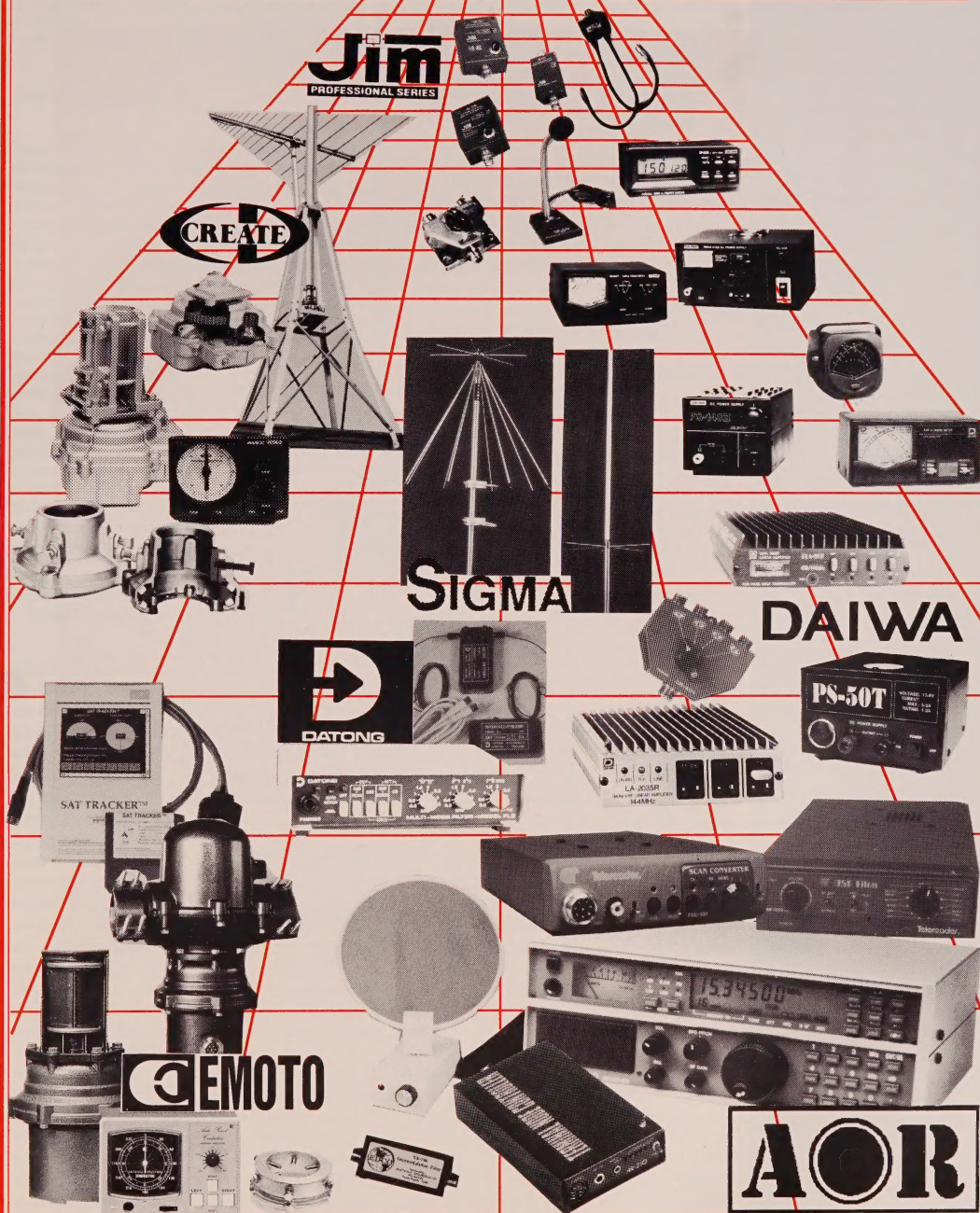
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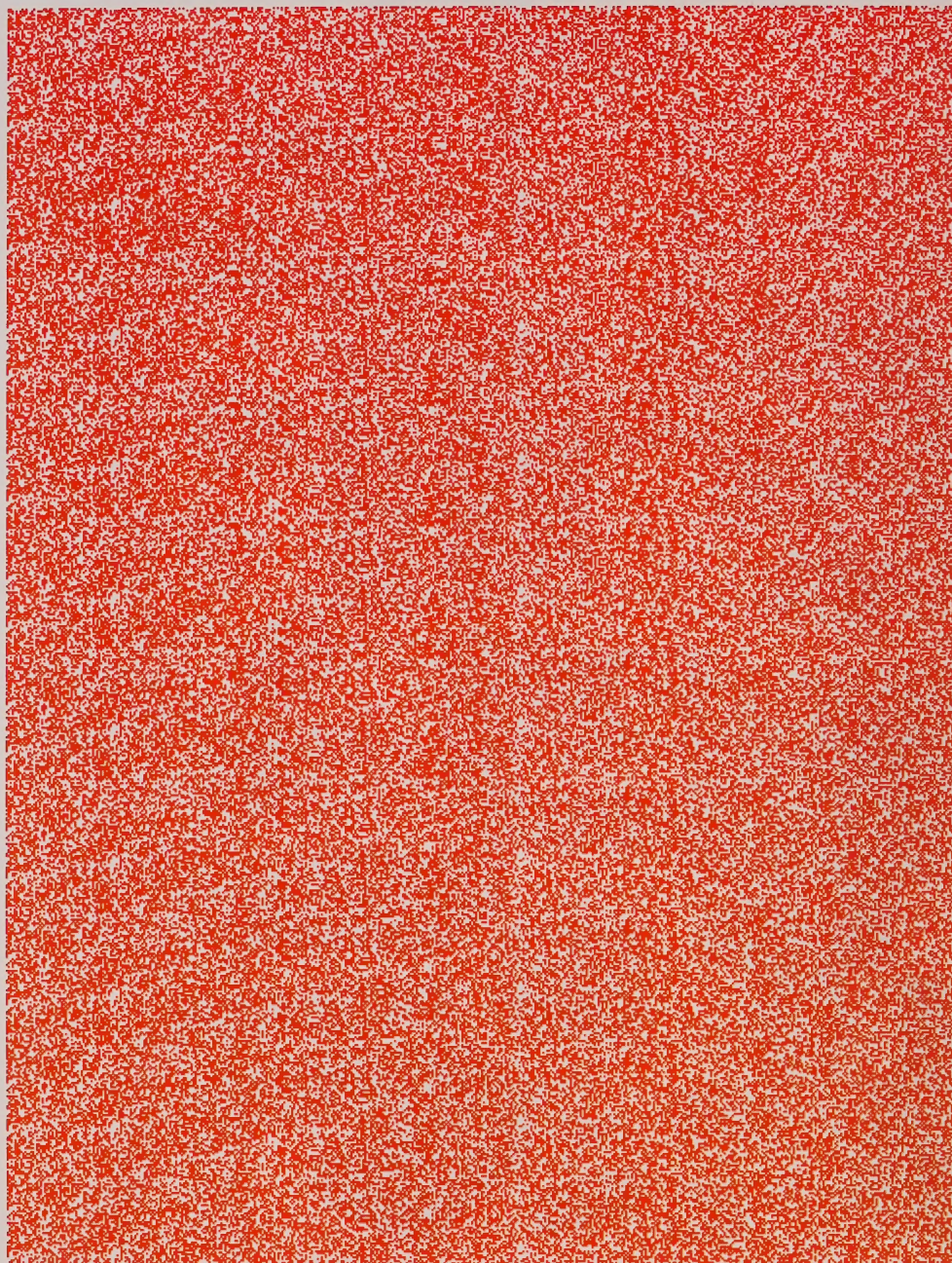


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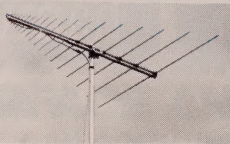
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• Also available: Create model CLP5130-2LP Yagi Beam with continuous 105-1300 MHz coverage in a smaller size.

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EDCO's TX-146 Inter-modulation Filter solves intermod problems by simply adding back in what the newer wide-band radios leave out - the high quality helical filter. Our hi-tech, 3-stage, fully automatic filter will attenuate signals outside the 2 meter band by as much as 40 dB when switched on!

Operation is foolproof and simple! Inside the compact, rugged filter housing is a special R.F. sensing circuit that automatically switches two R.F.-rated relays to bypass the filter during transmit, at up to 50 watts of power.

Installation couldn't be easier! Simply connect the TX-146 in-line with the radio's 2 meter antenna line (or the VHF side of the duplexer in dual-band installations) and hook the filter up to +12 VDC. That's all there is to it - the rest is automatic! The TX-146 includes an on/off switch and L.E.D. power-on indicator, which allows you to switch the filter off when it's not needed, as when operating in rural areas where intermod is not normally a problem. You'll discover the beeps and squawks have disappeared, allowing you to enjoy clear, clean 2 meter reception!



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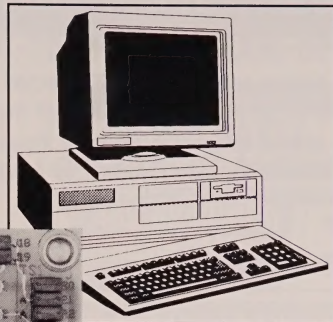
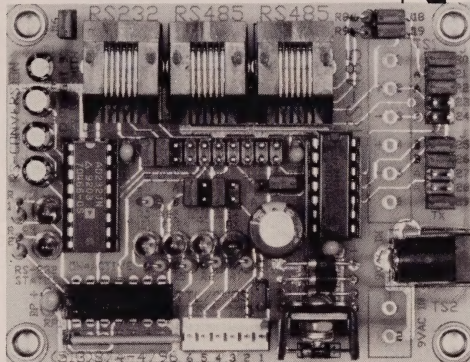
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Flea Market spaces are NOT selected on a first come, first served basis. The selection will be based on an equitable allocation of available spaces.

Flea Market spaces obtained for the purpose of parking individual vehicles does not comply with the intent of the Hamvention Flea Market operation. Such vehicles may be removed by the Hamvention Committee.

General Rules

1. Vending or trading is not authorized outside of the selling hours.
2. No self-contained vehicles are permitted in the flea market.
3. The standard space is approximately 9' x 18'. No vehicle or set-up may exceed the designated area.
4. Flea Market spaces are for the express purpose of selling or trading amateur radio, electronic or related equipment and supplies. Flea Market spaces which are not being used for selling or trading may be reclaimed by HAMVENTION Flea Market personnel and reassigned.
5. Security personnel will be in the area. However, HAMVENTION can not be responsible for attended or unattended property.
6. Vehicular traffic in the flea market will be extremely limited during open hours. Vehicular access to your spaces during open hours will be by permission of Flea Market personnel only and may not be available at all during busy times. We recommend that you arrive early enough to set-up before opening hours.
7. Bicycles, skateboards, mopeds, non-HAMVENTION golf carts or other similar forms of transportation are not permitted in the Flea Market area. Any exception to this policy must be authorized by the Flea Market Committee.
8. Food and beverage sales by other than Hara Arena are not permitted on the premises.
9. No open flames or any other potential fire hazard will be permitted in the Flea Market area.
10. No camping is permitted in the Flea Market area.
11. No paging other than medical emergencies is permitted in the Flea Market due to zoning restrictions.
12. No firearms or weapons are permitted on the premises for sale or any other purpose.
13. FLEA MARKET SPACES ARE NOT TRANSFERABLE !!! If you have Flea Market spaces that you can not use, please contact the Flea Market Committee. We will probably be able to reassign them. Illegal trading of spaces to create Flea Market areas larger than the three allowed spaces may result in your removal. Any exceptions to this policy must be approved by the Flea Market Committee in advance. The complete listing of Flea Market spaces is used for locating individuals in an emergency during the show.
14. A HAMVENTION general admission ticket is required for entrance to the Flea Market.
15. The use of portable generators in the Flea Market is strongly discouraged. Any conflict which develops over noise or fumes will be resolved in favor of the individuals being disturbed by the generator.
16. Any violation of these rules may be used by Flea Market personnel to justify removal of any vendor. These rules are required to comply with fire department, security and some common courtesy needs. We request the cooperation of all participants to help make this show as pleasant and as successful as possible.
17. NO vehicles will be parked under the tent.

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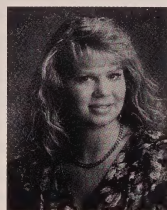
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DARA Scholarship Program

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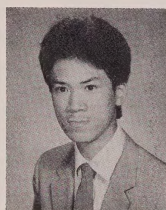
Since 1984, the Dayton Amateur Radio Association has been able to assist young amateurs heading to college by awarding scholarships. In 1993 eight students each received \$2000 toward tuition at the school of their choice. The program is open nationwide to any FCC licensed amateur radio operator graduating from high school in the year the award is given. There are no restrictions on class of license or course of study. The 1993 scholarship recipients are:

Barbara Curry, N4TCC, of Ironton, Ohio. Barbara holds a Technician Class license and attends the University of Kentucky majoring in medicine.

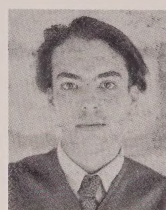


**Barbara
N4TCC**

Steven Fook, N2PIF, of Holbrook, New York. Recipient of the David L. Beam Memorial Scholarship. Steven holds a General Class license and attends State University of New York majoring in computer science.



**Steven
N2PIF**



**Dwight
N0NTM**

Dwight Harris, Jr., N0NTM, of Fairfield, Iowa. Dwight holds a Technician Class license and attends Maharishi International University majoring in industrial engineering.

Martin H. Gruen, KA2VLP, of North Lauderdale, Florida. Martin holds an Advanced Class license and attends Stetson University majoring in biology.



**Martin
KA2VLP**

Jerry "Jay" Hensley, Jr., N8HUT of New Paris, Ohio. Jay holds a General Class license and attends Wright State University majoring in education/rehabilitation.



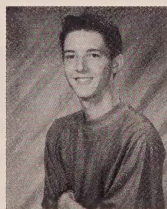
**Jay
N8HUT**



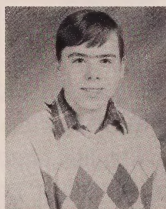
**Dean
KE0WO**

Dean Madsen, KE0WO, of Storm Lake, Iowa. Recipient of the Charles G. Frye Memorial Scholarship. Dean holds an Extra Class license and attends Iowa State University majoring in computer engineering.

David C. May, KA7STL, of St. George, Utah. David holds an Advanced Class license and attends Dixie College majoring in computer engineering.



**David
KA7STL**



**Matthew
N8PIG**

Matthew Minney, N8PIG, of Shock, West Virginia. Recipient of the Robert F. Zimmerman Memorial Scholarship. Matthew attends Glenville State University majoring in mathematics.

Entries for 1994 scholarships must be received by May 13 with winners announced on or about June 1.

For further information and application forms write:

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kit quickly adapts any Bird Model 43

Wattmeter to measure audio peak power

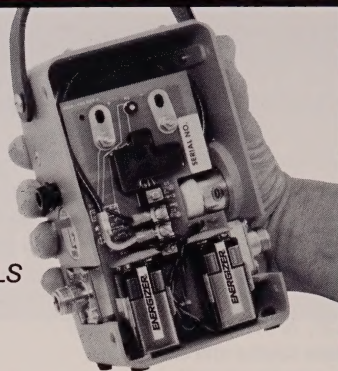
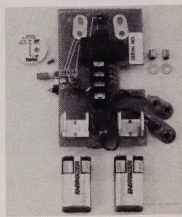
of single sideband

and other AM modulated signals.

The 4300-400 kit pc board mounts inside the Model 43 housing, on the meter studs. Estimated conversion time is only 15 minutes from start to finish.

Once modified, you can measure peak power to an 8% F.S. accuracy, without affecting cw operation or accuracy.

And, the Model 4300-400 is surprisingly inexpensive. Contact your Bird distributor or factory for details.



BIRD

Electronic Corporation

30303 Aurora Rd., Cleveland (Solon), Ohio 44139 — 2794
216-248-1200 TLX: 706898 Bird Elec UD FAX: 216-248-5426
WESTERN REGION OFFICE:
Bird Electronic Corp.
621 Ojai Ave., Suite F, P.O. Box 28, Ojai, CA 93023 805-646-7255

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VARI-NOTCH® DUPLEXERS FOR 2 METERS

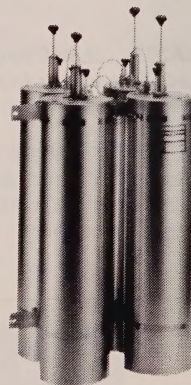
The TX RX Systems Inc. patented Vari-Notch filter circuit, a pseudo-bandpass design, provides low loss, high TX to RX, and between-channel isolation, excellent for amateur band applications. TX RX Systems Inc. has been manufacturing multicoupling systems since 1976. Other models available for 220 and 440 MHz, UHF ATV and 1.2 GHz.

MODEL 28-37-02A

144-174 MHz

92 dB ISOLATION AT 0.6 MHz SEPARATION

400 WATT POWER RATING



19" RACK MOUNT

TX RX SYSTEMS INC.

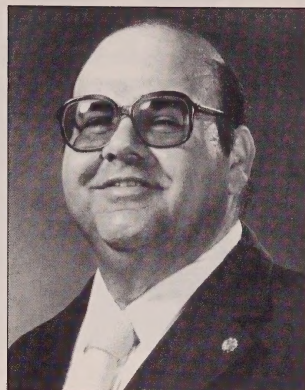
8625 INDUSTRIAL PARKWAY, ANGOLA, NY 14006
TELEPHONE 716-549-4700 FAX 716-549-4772 (24 HRS.)



Banquet

DAYTON
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We are extremely pleased to have as our Banquet speaker, Joseph M. Costello, III, WA5HSI. Joe is President and CEO of WRNO International and is best known in the Shortwave Broadcasting circles for promoting the licensing and establishment of a U.S. commercial shortwave station. Joe had always been interested in shortwave radio and was a "registered shortwave monitor" for Popular Electronics magazine in the 50's. He received his ham license at age 16 and his First Class Radio Telephone Operator's License with radar endorsement when he was 20. It was his intimate knowledge of Ham Radio that peaked his curiosity in HF Broadcasting. Using nothing more than his ARRL Handbook, the FCC Rules and Regulations, and his existing knowledge, he designed an HF Shortwave Station with a radiated power of 3.2 megawatts. This station is the United States's only privately owned, Commercial Shortwave Station. Mr. Costello states, "You can't imagine the thrill of connecting your Collins KWM-2 to a \$150,000 log periodic antenna covering over five acres of ground. It sure beats a long wire or beam!"



Joseph M. Costello, III, WA5HSI

Master of Ceremonies for the 1994 Hamvention Banquet is Scott Allen, a Radio and TV personality who began his career in the Dayton market while still in junior high school. Over the past 30 years Scott has hosted both Radio and Television programs in Houston, Dallas and Los Angeles. In 1985, while hosting a national network radio show, he was bitten by the computer bug, and in addition to his broadcasting career, Scott has become a much sought-after consultant to various firms across the nation. He is looking forward to many new and exciting adventures soaring down the "information Superhighway". During 1994 he hopes to get his "ticket". We think you'll enjoy Scott's candid take on life.



Scott Allen

BANQUET MENU

The Hamvention Banquet will be held at the Dayton Convention Center on Saturday evening with door opening at 6:00 p.m. Cash bars will also be available. Dinner will be served beginning at 7:30. The Hal Harris Orchestra will provide background music for the evening. Bus service will be provided from the KOA campground and the Miami Valley Technology Center only.

Garden Salad

Filet Mignon

Baked Potato with Butter and Sour Cream

Capri Blend

Assorted Rolls and Butter

Banana Chocolate Chip Cake

Coffee & Decaf - Hot Tea - Milk - Ice Tea

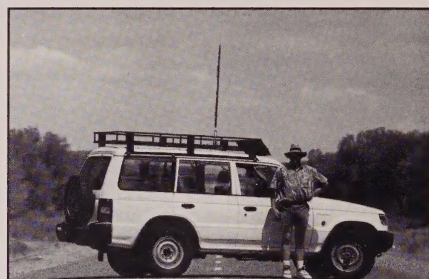
Carafes of wine available at C.O.D. Bar

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- **Outbacker Jr.** OBJR8: 4 ft. tall. 80-10m plus WARC's. 150 watts PEP. 3/8-24 thread. Terrific for hatchback or roof mounting and RV's.
- **Custom Models** For MARS, CAP or any frequency combinations between 1.8-30MHz by special order. Call for info.

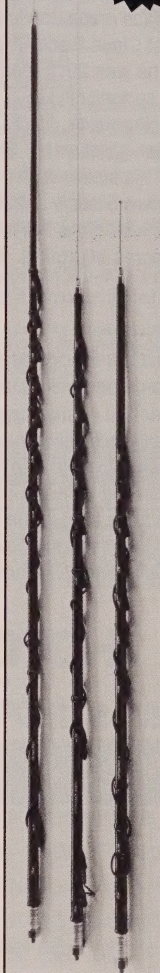
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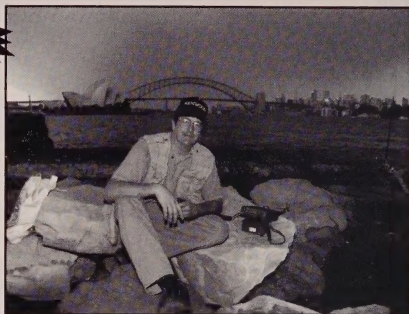
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to win a free gold plated
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- **BUILT TO LAST!** Main shaft has strong fiberglass core with helically wound radiator. Exterior covered with epoxy resin for strength and coated with polyurethane for durability and protection. Band sockets are nickleplated brass. Mounting stud and stinger are stainless steel. Impervious to sun, snow or salt water. Will not crack, chip, peel or rust.
- **SHEER MOBILING ENJOYMENT.** No dinking around with base matching devices, tedious clips, or extra band coils.
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The Outbacker is made by Terlin Aerials of Western Australia. It has been performance-proven in the rugged bush country for over 20 years. Now, you can enjoy this exciting new import on your own mobile vehicle!

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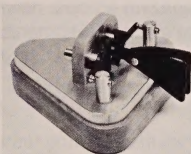
330 Cedar Glen Circle
Chattanooga, TN 37412
Phone (615) 899-3390
FAX (615) 899-6536
Tech Talk Time 6-10pm EST

Previous Amateur of the Year Award Winners

- 1955 - William C. Jenney, W8FYW; Westlake, Ohio
Benjamin S. Zieg, W9EHU, K4OQK; Atlanta, Georgia
- 1956 - Edmund C. Ryan, W8LRR; Mansfield, Ohio
- 1957 - Ralph Crammer, W8VHO; Columbus, Ohio
- 1958 - Rev. C. Lynn White, K4CC; Tavarres, Florida
- 1959 - Harlow Lucas, W8QQ; Columbus, Ohio
- 1960 - Paul Wolfe, W8IVE; Cincinnati, Ohio
- 1961 - Ed Bonnet, W8OVG; Dayton, Ohio
- 1962 - Dana Cartwright, W8UPB; Cincinnati, Ohio
- 1963 - Chester Funk, K8EUF, K7ZKL; Phoenix, Arizona
- 1964 - H. Ruble, W8PTF; Dayton, Ohio
- 1965 - Carl B. Snyder, W8ARW; Greenville, Ohio
- 1966 - Robert K. Caskey, W9DNQ; Indianapolis, Indiana
- 1967 - Jack Gray, W8JDV; Mason, Ohio
- 1968 - Elmer Schubert, W8ALW; Cincinnati, Ohio
- 1969 - Wayne Walters, W9DOG; Plainfield, Indiana
- 1970 - Kay Anderson, W8DUV; Huntington, West Virginia
- 1971 - Al Michel, W8WC; Cincinnati, Ohio
- 1972 - Don C. Miller, W9NTP; Waldron, Indiana
- 1973 - Ray E. Myers, W6MLZ; San Gabriel, California
- 1974 - Barry Goldwater, K7UGA; Scottsdale, Arizona
- 1975 - Richard A. Daniels, W4DGU; Arlington, Virginia
- 1976 - Joseph M. Hertzberg, N3EA; Bryn Mawr, Pennsylvania
- 1977 - Rafael M. Estevez, WA4ZZG; Hialeah, Florida
- 1978 - Frank Schwab, W8OK; Dayton, Ohio
- 1979 - George G. Batterson, W2GB; Rochester, New York
- 1980 - Wayne Overbeck, N6NB; Woodland Hills, California
- 1981 - Eric C. Shalkhauser, W9CI; Washington, Illinois
- 1982 - Robert G. Heil, Jr., K9EID; Marissa, Illinois
- 1983 - Katashi Nose, KH6IJ; Honolulu, Hawaii
- 1984 - Dave L. Bell, W6AQ; Los Angeles, California
- 1985 - John J. Willig, W8ACE; Sarasota, Florida
- 1986 - Roy Neal, K6DUE; Woodlawn Hill, California
- 1987 - Carole Perry, WB2MGP; Staten Island, New York
- 1988 - Bill Bennett, W7PHO; Seattle, Washington
- 1989 - Bill Pasternak, WA6ITF; Saugus, California
- 1990 - Stephen Mendelsohn; WA2DHF; Dumont, New Jersey
- 1991 - John B. Johnston, W3BE; Derwood, Maryland
- 1992 - Richard Baldwin, W1RU; Waldboro, ME.
- 1993 - Harry Dannals, W2HD; Charlottesville, VA.



"The Oldest Name In Amateur Radio"

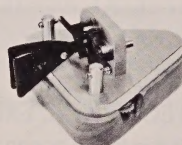


BRASS RACER IAMBIC

The newest addition to the Vibroplex family — the Brass Racer Iambic — A distinctive new design of Iambic paddle crafted from solid brass and mounted on a base of polished hardwood. No springs to fly off the middle of a contact. Superior Vibroplex quality. Always worth the difference and now a new Vibroplex look.

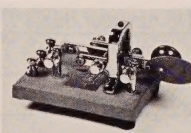
BRASS RACER EK-1

An even more exciting step is the new Brass Racer EK-1, an electronic keyer built into the base of our new Brass Racer Iambic paddle. Using the Curtis 8044 chip, this self-contained keyer and paddle is fully Iambic with dot/dash insertion and adjustable speed control. Use on either tube or solid state rigs. The perfect unit for mobile, DXpedition, or just plain fun.



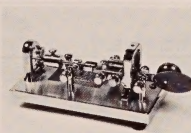
THE IAMBIC

The distinctive look and quality of the Vibroplex Original is fashioned into the finest Iambic paddle anywhere. The dual paddles allows the operator to utilize automatic dot/dash insertion and other unique features of the modern electronic keyer. Vibroplex distinction for the modern operator.



THE VIBROKEYER

The Vibrokeyer is designed for "Bug" operators who want to move to electronic keyers without relearning keying. The single lever paddle initiates the automatic dots and dashes of the electronic keyer with the same motion used to operate the "Bug". For those who want to combine traditional skill with modern electronics.



THE ORIGINAL

In 1890 Horace Martin searched for relief from the "glass arm" telegraph operators were getting from pounding the straight keys. His answer, the Vibroplex Original was an instant success. The vibrating lever arm automatically produces dots while dashes are made manually. Still popular today, the distinctive sound of the "Bug" can still be heard. It is the signature of the true C.W. expert.

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Awards Nomination

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Help us locate nominees for our Amateur of the Year, Special Achievement, and Technical Excellence Awards. Do you know an outstanding amateur in your club, community, or from on-the-air contacts? Does this person excel in some phase of amateur radio? Do you feel this person deserves world-wide recognition? All amateurs are eligible – Novice through Extra. Awards are selected by the awards committee based on the information received.

Documentation is beneficial. Magazine articles, newsletters, newspaper clippings, videos, etc. will better inform the awards committee of your candidate's accomplishments. These materials become the property of DARA and cannot be returned.

AMATEUR OF THE YEAR

This is for the special person who has made a long term commitment to the advancement of amateur radio. We are looking for a well-rounded individual who has contributed to our hobby in some outstanding way.

SPECIAL ACHIEVEMENT

This is for the special person who has made an outstanding contribution to the advancement of amateur radio. This award is usually given to a respected amateur who spearheaded a single significant project.

TECHNICAL EXCELLENCE

This is for the person who has made an outstanding technical advancement in the field of amateur radio.

Name of nominee _____ Call _____

Address _____

City _____ State _____ Zip _____

Phone () _____ Amateur club affiliation _____

How has this individual contributed to Amateur Radio ? _____

What else do you know about this individual ? _____

Your name (please print) _____ Call _____

Address _____

City _____ State _____ Zip _____

Phone: ☐ Day ☐ Evening () _____ Your Signature _____

Send nomination to: **Hamvention Awards Chairman** Please feel free to duplicate this form.

Box 964

Dayton, OH 45401-0964

Award Winners

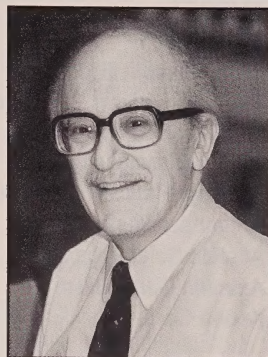
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These awards will be presented at the
Hanvention Banquet.

AMATEUR OF THE YEAR AWARD

Perry Williams, W1UED

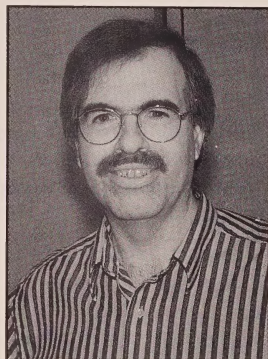
As Perry Williams retires, he leaves behind a history of some forty years of service to the amateur radio community. He was manager of the Membership Services Department at the ARRL before becoming Washington Area Coordinator in 1980. As Washington Area Coordinator his duties involved regular FCC and Federal agency liaison, Congressional lobbying on amateur and spectrum allocations, and information gathering from Capitol Hill and other agency sources. He has been viewed as a resource by those he lobbied, and brought a constructive approach to the task. Most recently, he helped obtain legislation that permits the FCC to issue call signs selected by the licensee and worked to head off license fees for the amateur radio service.



SPECIAL ACHIEVEMENT AWARD

Russ Kroeker, N7HGE

Russ Kroeker's enthusiasm and ability to carry 80-pound power supplies in the snow readily brought him the position of Repeater Chairman for the Boeing Employees Amateur Radio Society (BEARS). His plans for this committee changed the Northwest UHF/VHF spectrum forever. Russ's efforts have produced the Evergreen Intertie and InterProvincial Network which is the 450 MHz backbone intertie of 29 private or club-owned 2 meter and 220 MHz repeaters from southern Oregon to Vancouver Island. The system relies on several stations sited upon almost inaccessible mountains which use controllers and equipment designed by Russ, or for which he has provided maintenance in all weather! Additionally, Russ spearheaded the installation of the first amateur repeater link in China, from Beijing to the Great Wall, and the implementation of the Bamboo Intertie from China to the United States.



TECHNICAL EXCELLENCE AWARD

Dick Newell, AK1A

Dick Newell's creation of the PacketCluster™ concept and software is used around the world to implement the many interconnected DX Clusters used by DX'ers and Contesters. It has changed the way contests are operated and brought about the new categories of contest operation: Single Operator Assisted and Single Operator Unlimited. It provides DX spots, Networked E-Mail, dissemination of DX and ARRL bulletins, retransmission of WWV reports, and a modern equivalent of the old-fashioned trading post where ham gear can be sold or traded. What began with a single node and only a few users has grown to almost seventy nodes and on occasion, over 1000 simultaneous users in the Eastern PacketCluster™ System.



Prize Donors

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Major Prize Donors

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Top Ten Prize Donors

WE WOULD LIKE TO EXTEND A SPECIAL THANKS TO OUR TOP TEN PRIZE DONORS FOR 1994.

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|-------------------------------|-------------------------------------|
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| 2. Yaesu U.S.A. | 7. Buckmaster Publishing |
| 3. Kenwood U.S.A. Corporation | 8. Alinco Electronics, Inc. |
| 4. I T C Instruments | 9. OPTOelectronics |
| 5. ICOM America, Inc. | 10. Standard Amateur Radio Products |

We greatly appreciate their extraordinary participation and support of the 1994 Dayton Hamvention.

Be sure to stop by their booths and say "Thanks".

\$1000.00 and over Prize Donors

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CQ Communications, Inc.	Radio Shack, Div. of Tandy Corp.
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Hewlett Packard Co.	Telex Communications, Inc.
Midland International Corp.	U. S. Robotics

STUDENT TICKET DRAWING

A Special Drawing will be held Sunday,
12:00 noon at the Prize Booth for those
with student tickets.

Major Prizes

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The Dayton Hamvention is proud to present an outstanding array of prizes for 1994, representing approximately 250 exhibitors and other donors.

Prizes will be awarded hourly from 1:00 p.m. Friday to noon Sunday.

Additional Bonus prizes will be awarded bi-hourly from 1:00 p.m. Friday to 11:00 a.m. Sunday.

Please check the monitors located throughout the arena complex for winning ticket numbers.

All prizes not claimed by 1:00 p.m. Sunday will be redrawn at 2:00 p.m. You **MUST** be present in the Main Arena during this drawing to win.

The drawing for the Main Prizes will begin at approximately 3:00 p.m. Sunday. You do not have to be present to win. Prizes not claimed during this drawing will be shipped to the winner at no charge.

- **Yaesu** FT1000D HF Transceiver with FL7000 Linear Amplifier, SP-5 External Speaker and MD-1C8 Mic. – Yaesu's "Dream Station"
- **Mosley** PRO-96-3 10-12-15-17-20-40 Meter 9 Element Beam – Everything a "HAM" could ask for.
- **ITC Instruments** SA1800B 2MHz to 1800 MHz Spectrum Analyzer with options #1,2,3,4,5 and 6. Central Frequency Display and 10 Digit Frequency Counter.
- **ITC Instruments** SA1300A 2MHz to 1300 MHz Spectrum Analyzer with options #1,2,3,4,5 and 6.
- **ICOM** All New IC-736 HF- 6 Meter 100 Watt All mode Transceiver with SP-21 Speaker and SM-8 Desk Mic.
- **ITC Instruments** SA600A 2MHz to 600MHz Spectrum Analyzer with options 1,2,3,4,5 and 6.
- **Yaesu** FT736R 2 Meter/70CM All Mode Transceiver with SP-767 External Speaker and MD-1c8 Desk Mic.
- **Icom** IC737A HF All Band General Coverage Transceiver, Internal Antenna Tuner with SP-21 External Speaker, PS-15 Power Supply and SM-8 Desk Mic.
- **Kenwood** TS450 S/AT Light Weight, Compact HF Transceiver with Built in Antenna Tuner with PS-53 Power Supply and MC-80 Desk Mic.
- **Telex Communications, Inc** TH-11DX 5 Band Beam Antenna with "Ham 4" Rotor.
- **Icom** IC-DELTA 100H Tri-Band Mobile FM Transceiver. With detachable front panel and separate band controls.
- **Kenwood** TS-50S Compact 160-10 Meter HF Transceiver with Antenna Tuner.

Special Banquet Prizes

A wide assortment of prizes will be given away at the 1994 Hamvention Banquet.

Winners must be present at the banquet to claim the prize.

Hewlett Packard DeskJet 550C Color Printer

ICOM IC-2700H Dual Band Mobile

Kenwood TS-140S HF Transceiver

ITC Instruments SA1800B Spectrum Analyzer w/opts.

U.S. Robotics Courier VFC W/FAX HST, V32 Turbo Modem

Mosley PRO-57H 7 Element 10-20 Meter Beam

Kenwood TM 642A Tri Band Mobile Transceiver

Yaesu FT-890AT Compact HF Band Transceiver

Yaesu FRG8800 Communications Receiver 100kHz-30Mhz

Mosley PRO-67B 10,12,15,17,20 & 40 Meter 7 Element Beam

EDCO AOR/TELEREADER TSC-100 SSYV Color Converter

P. W. Publishing Ltd. Lifetime Subscription to Practical Wireless

Bonus Prizes

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At press time, we have commitments for over \$140,000 in prize donations! We heartily thank all those who have donated prizes this year. The following Bonus Prizes will be drawn bi-hourly beginning at 1:00 p.m. Friday. You must claim these prizes by 1:00 p.m. Sunday.

Alinco DJ-580T Dual Band HT
Kenwood TH-22AT 2m HT
Amateur Radio Works.....Model 200 ASY Weather Fax
Yaesu FT-530 2m/70cm Dual Band HT
Radio Shack HTX-202 HT
Azden AZ-21A 2 m Handheld Transceiver
Mosley RV7 & RV8 WARC Vertical Ant
Bird Electronic Model 43 Wattmeter/Case
Cd-ROM Source CD-ROM Drive & Disk
Standard Amateur Radio Products C158A 2m HT
CQ Communications Lifetime Subscription/
Popular Comm.

Alinco DJ-G1T 2m HT
Yaesu FT 2400H VHF/FM Paging Transceiver
Coaxial Dynamics Model 81000-A Wattmeter/Case
Kenwood.....TH-78A Dual Band HT
Mosley A-56 6m Beam
EDCO DP-810 Digital SWR/Wattmeter
Hewlett Packard HP E3630A Power Supply
Hustler, Inc. G6-270 Antenna
ICOM IC-T21A 2m Handheld
CQ Communications Lifetime Subscription/
Popular Comm.

Alinco DR-600T Dual Band Mobile
PolyPhaser Single Point Ground Protection System
ICOM IC-228H 2m Mobile
Kenwood TM-241A 2m Mobile
CQ Communications Lifetime Subscription/
Computer Craft

Kenwood TM-742A Tri-Band Mobile
KLM Antenna KT 34A Tri-Band Antenna
Yaesu FRG-8800 HF/VHF Gen Coverage Receiver
OPTOelectronics Model SSB-220
Frequency Counter

Midland#73-005 VHF 2 Meter Handheld
Missouri Radio Center.....Yaesu FRG-100B
General Receiver
Mosley TA-33Jr WARC 10-20m Beam

CQ Communications Lifetime Subscription/
CQ Magazine

Mosley PRO-67-B 7EL 10 thru 40 Beam
NCG/Comet Antenna GP-9 2m/70cm Vert Ant.
Yaesu FT 2400H VHF/FM Paging Transceiver
National Tower BX-32 Tower Assy
OPTOelectronics Model 3000A Frequency Counter
CQ Communications Lifetime Subscription/
CQ Magazine

OPTOelectronics Model R-10 Interceptor
Freq. Counter

Yaesu FT-5100 2m/70cm Dual Band Transceiver
Outbacker Ant Sales.....Perth Antenna W/K-400 Mount
P.W. Publishing Lifetime Sub/Practical Wireless
Mosley TA-34-XL 4EI Beam 10-15-20
PolyPhaser Single Point Ground Protection System
Yaesu FT-840 HF Transceiver
Mosley TA-53M 10 thru 20 Beam
PolyPhaser Single Point Ground Protection System
R & L Electronics.....ICOM IC-25A HT 2m HT
Radio Shack HTX-202 HT
Yaesu FT-416/25-B Handheld
Mosley AM-14-2 14 EI 2m Beam
ICOM IC-2GXAT 2m Handheld
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Radio Shack HTX-202 HT
Radio Center U.S.A. KLM 432 LDX Antenna
Sinclabs SBP144-4 2m Band Pass Cavity Filter
SCG, Inc. SCG-230 Controlled Antenna Tuner
Mosley TA-33M WARC 10 thru 20 Beam
Standard Amateur Radio Products.....C188A 2m HT
ICOM IC-3230H Dual Band Mobile
Standard Amateur Radio Products C188A 2m HT
Yaesu FT-416/25-B Handheld
Startek Int'l 35-BG Frequency Counter
Universal Radio Sony ICF-SW800 Radio
Vectronics Div of Valor VC300DLP Antenna Tuner
Yaesu FT-416/25-B Handheld



The New Classic

AR3030 HF Receiver 30kHz-30MHz
AM, S.AM, NFM, USB, LSB, CW & FAX



The **AR3030** receiver combines a classic appearance using a robust extruded aluminum all metal case with an advanced DDS (Direct Digital Synthesizer) tuning system. The result is the **NEW CLASSIC from AOR**

The **AR3030** has been designed by our special project team who fully appreciate the demands of today's serious shortwave listener. The aim has been to provide the highest possible receiver performance and features using the latest technology while retaining a traditional appearance and user friendly operation.

The **AR3030** boasts a wide frequency range from 30kHz-30MHz and all mode reception as standard AM, S.AM (Synchronous AM), NFM, USB, LSB, CW and FAX. The legendary high performance **Collins** 6kHz drop out mechanical filter is equipped as standard order to provide ultimate AM selectivity. (Our "Collins Inside" logo and use of the name has been authorized by **Rockwell International** and we are proud of that fact.)

For further information, please call or FAX our marketing partner:



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MAJOR FEATURES

- DDS (Direct Digital Synthesizer) with 10Hz tuning resolution
- High sensitivity and Excellent selectivity - 6kHz 8 resonator Rockwell-Collins mechanical filter installed
- Ease of operation
- Tuning via keyboard or main tuning knob
- Carrier reinsertion technique for SSB reception and adjustable BFO pitch for both SSB and CW
- Unique METER band keyboard entry
- Large 2.6" front facing speaker with ample 3W audio output
- 100 memory channels
- Dual VFO
- RS232C port for computer control
- AGC Control with AGC Off position
- Large backlit LCD
- Accurate analog S meter
- COR (Carrier Operated Relay) for remote start/stop for recorder and more
- Optional VHF Converter
- Optional Rockwell-Collins SSB and CW Filter



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Generate High Quality, Full Color SSTV From Anywhere!



A Complete SSTV Unit For Those On The Move!

TSC-100A, a self-contained intelligent slow scan converter, is the newest addition to the AOR-Telereader's growing line of advanced communication products. This compact marvel does it all with a few convenient front panel switches, a standard Camcorder or video camera and a TV monitor. Send your favorite images to your friends and families over any radio link - VHF, UHF, HF or even a telephone. It's so simple to operate. With it's advanced 16-bit DSP frame memory (can be extended up to 4 frames), automatic mode recognition, and built-in microphone relay, you are ready to send High Quality, Full Color Images from the field or your radio shack. The compact TSC-100A is fully compatible with ROBOT color 36, 72, Amiga AVT 90 and 94 second mode - in a package the size of your favorite mobile rig. It's truly a remarkable SSTV converter for anyone on the move.

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SGC**SG-230**

SMARTUNER

**HF ANTENNA COUPLER
SSB, AM, CW & DATA
FAST-INTELLIGENT-ACCURATE
OPERATES WITH ANY HF TRANSCEIVER**

The *Smartuner* high technology coupler intelligently tunes any length antenna (8 to 80 ft) in the HF band. The unit will operate with any HF transceiver within its' specifications. The *Smartuner* switches 64 input and 32 output capacitance combinations plus 256 inductance combinations in a "pi" network resulting in over a half-million different ways to ensure a perfect match for the transceiver. And, *it remembers the frequency and the tuning values* and will re-select these values in less than 10 ms next time you transmit on that frequency.

SGC WARRANTY REGISTRATION CARD		PERFORMANCE INFORMATION	
Card must be mailed within 10 days of purchase to validate warranty.		LENGTH OF TIME TO INSTALL: <u>5 hrs</u> (WITH COPPER STRIP) (1000)	
NAME: <u>J. MARTINO</u>	VESSEL NAME: <u>AFRICAN ROVER</u>	WAS SATISFACTORY TEST CALL MADE? <u>YES</u>	
ADDRESS: <u>SEE BELOW</u>		DISTANCE COMMUNICATED: <u>USSR/JAPAN/N.Z.</u> (1000)	
TELEPHONE: _____	SERIAL NBR: <u>QA90484</u> VOLTAGE: <u>12V</u>	Circle One	
MODEL: <u>SG-230</u>		INSTALLATION TUNING TEST CALL VOICE QUALITY	
PURCHASED FROM: <u>SGC</u>	DATE INSTALLED: <u>1 DEC 89</u>	Simple + Fair Poor Simple + Fair Poor Good + Fair Poor Good + Fair Poor	
DATE PURCHASED: <u>1 MAY 89</u>	DATE INSTALLED: <u>1 DEC 89</u>	YOUR COMMENTS: <u>WHAT CAN I SAY! FIRST CONTACT NEAR MOSCOW 5-5</u>	
INSTALLED BY: <u>J. MARTINO (OPERATOR)</u>			
CAPE TOWN DEPT OF STATE WASHDC 20521			

* refer to owners manual for full warranty terms

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HAM PRICE:
\$595.00**



- MICROPROCESSOR CONTROLLED
- NON-VOLATILE MEMORY
- WATERPROOF
- B.I.T.E. INDICATOR

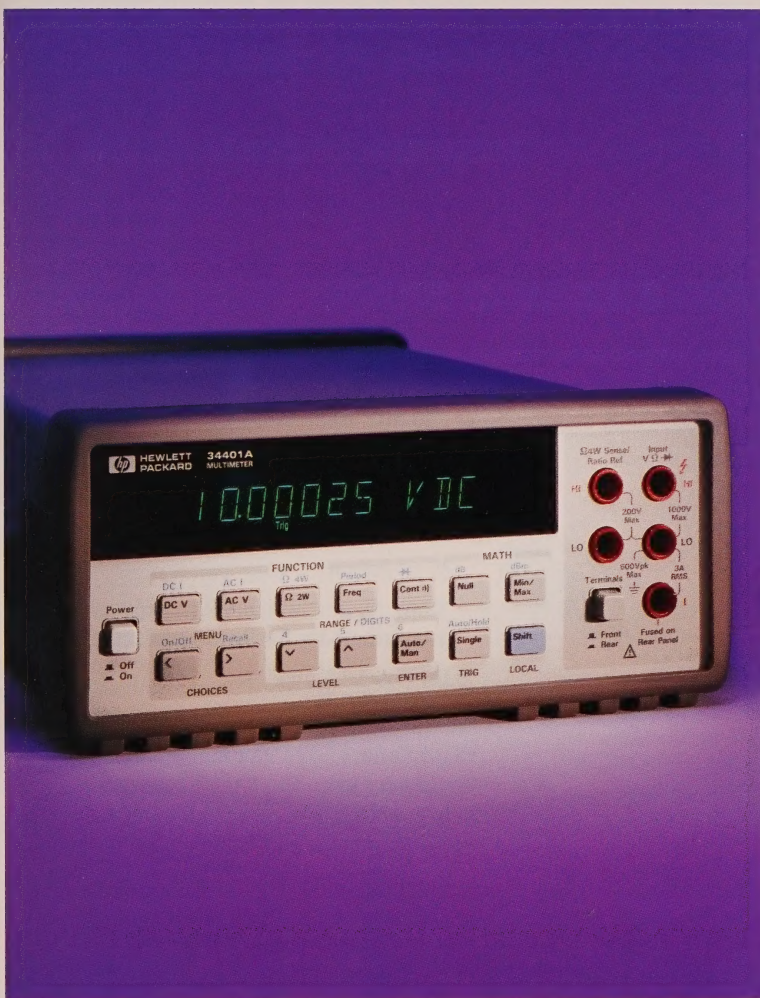
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- 10 ms RETUNING TIME
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Price	\$995*	\$1495**
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DC 1 Year Accuracy	0.0035%	0.0030%
AC 1 Year Accuracy	0.06%	0.08%
AC Bandwidth	3 Hz to 300 kHz	20 Hz to 100 kHz
Interface	HP-IB & RS-232	GP-IB
Programming Languages	Fluke 8840A/42A SCPI HP 3478A	Fluke 8840A/42A
Measurement Functions	12	5
Internal Storage	512 readings	None
Warranty	3 years	2 years

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All Fluke specifications are as of 2/93.
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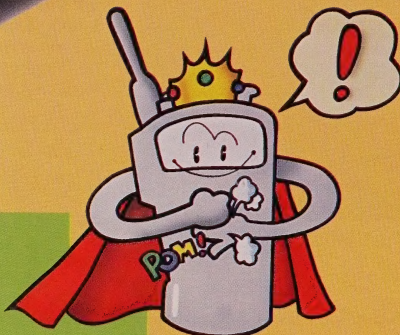


**Actual
size!**

FCC APPROVAL
PENDING

For more information on the C108A and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, features and price are subject to change without obligation or notice.

Standard Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60714
Tel. (312) 763-0081 Fax (312) 763-3377



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JUST LOOK AT WHAT YOU GET WITH THE C108A:

- 100-174.995 MHz receive,
FM or AM detector
- 200 mW Transmit Power
- 20 memories; stores frequency, offset
and CTCSS tone
- CTCSS built-in; 23 tones available
- Scan modes: 1 MHz, Full Range,
Memory, and Memory-Scan-Memory;
programmable for Pause and Busy
- DC Power: 2 alkaline
AA penlight cells

PLUS Battery Save and Auto Power Off, Keyboard Lock. The C108A measures only 2.3"x3.2"x1", weighs less than 5 oz.—get one for your shirt pocket today!

ACCESSORIES:

CHP111	Headset microphone
CHP150	VOX microphone
CLC401	Standard soft case
CLC402	Deluxe soft case
CMP111	Speaker microphone
CMP113	Tie pin microphone
CMP115	Mini speaker microphone
CNB401	NiCad battery pack
CSA401A	NiCad battery charger



STANDARD

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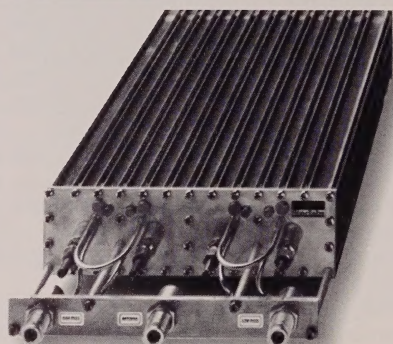
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Amateur Radio Products

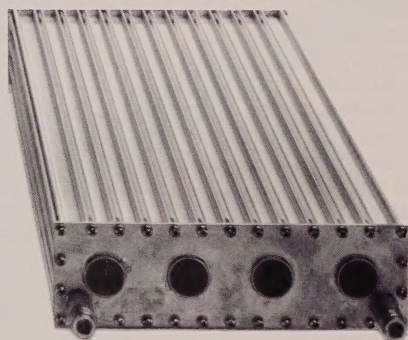
Professional Products for the Amateur Market



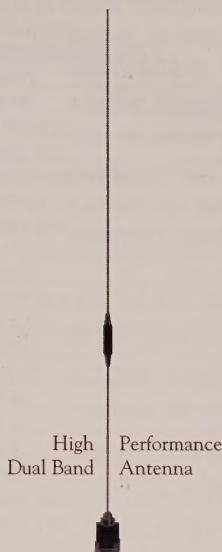
High Quality Diplexer
SD-3 (144-148 MHz) & (440-450 MHz)



Duplexers
SD445-4 (440-450 MHz) & SD1270-4 (1240-1300 MHz)



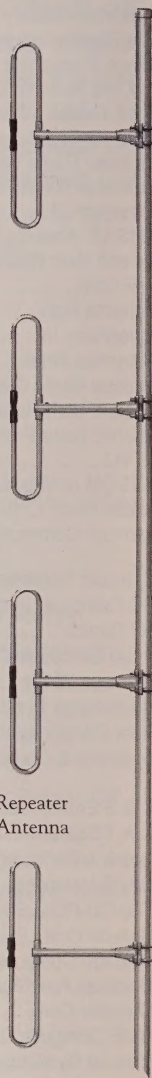
Bandpass Filter
SBP 144-4 (144-148 MHz)



High Performance Antenna
S270 (144-148 MHz) & (440-450 MHz)

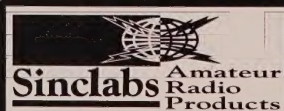


Duplexer
ARP2221E (218-225 MHz)



Repeater Antenna
ARP-210C-4 (144-148 MHz)

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HIGH SIERRA antenna

The answer to an HF mobileer's dream!



Continuous frequency coverage: The antenna covers all frequencies from 3.5MHz to 30MHz. As a result, the antenna is ready for use by commercial and government customers as well as amateurs and SWL's.

"Monoband" Performance: The 10:1 frequency coverage is obtained by use of the variable center loading coil technique pioneered by W6AAQ. High Sierra's exclusive "decoupling" collar eliminates the unused turns without sacrificing performance.

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"No-holes mounting": The photo shows one of our trailer hitch mounts installed on a typical passenger car. The mount is held in position by the hitch ball rather than by drilling holes in the vehicle. The design still allows a trailer to be attached. The antenna fastens to the mount via a tapered brass stud as opposed to the usual threaded stud. The antenna can be removed in seconds for safekeeping by just lifting upward.

\$289 plus S&H

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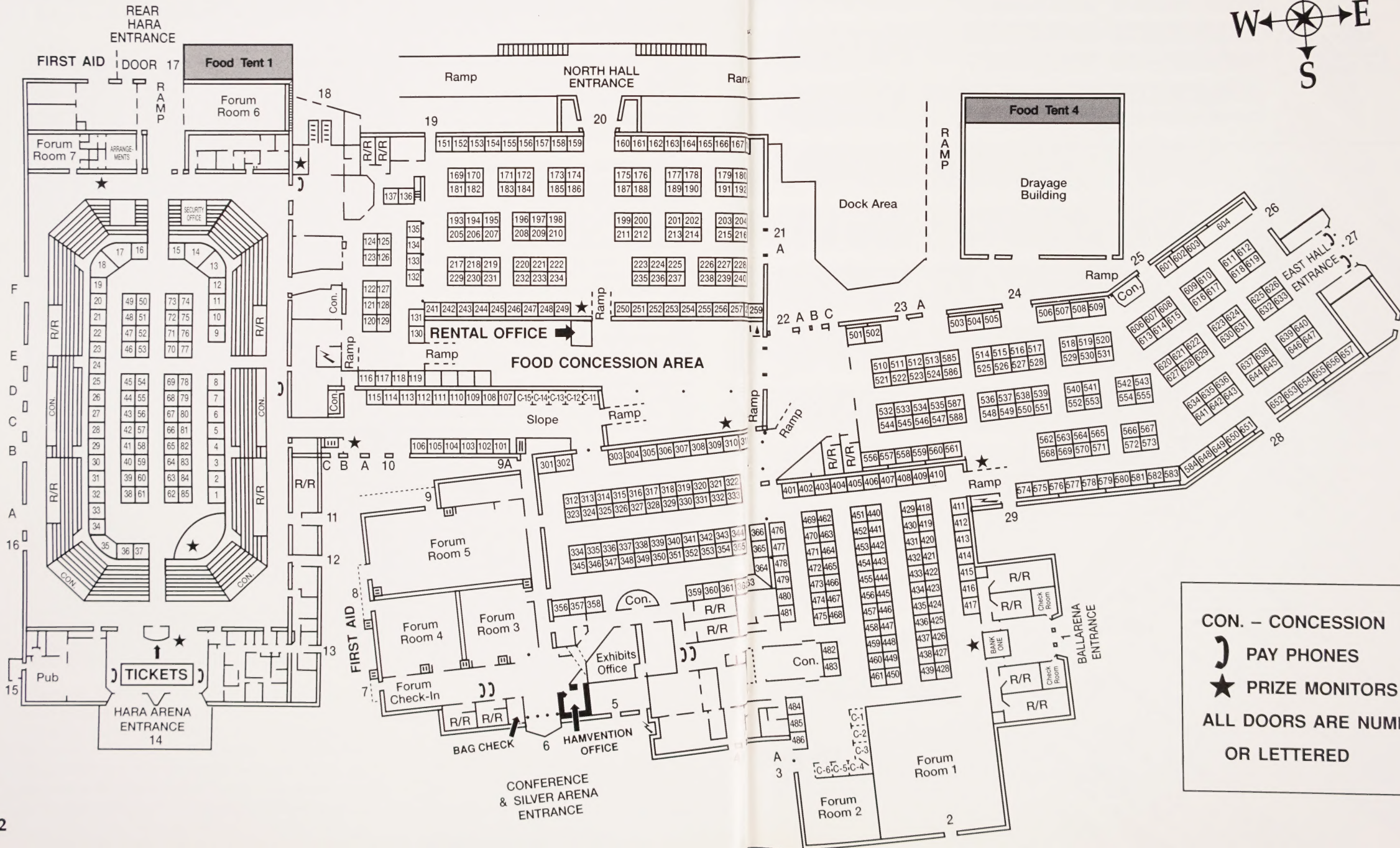
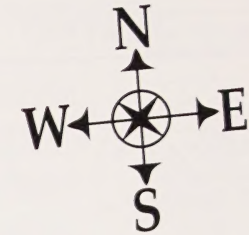
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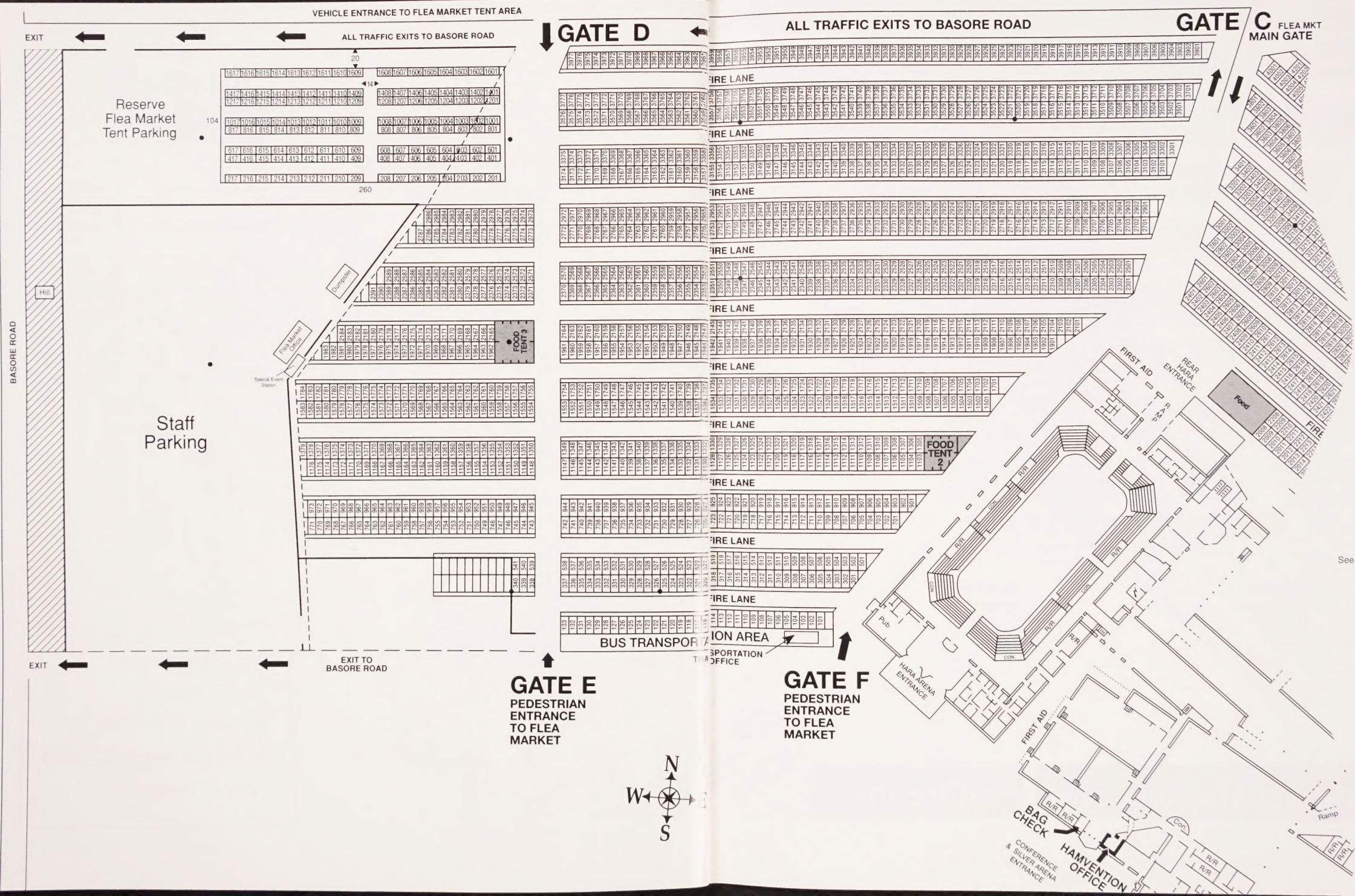


Exhibitor's Booth Location Map

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Flea Market Map



See reverse side for west parking lot

GATE E
PEDESTRIAN
ENTRANCE
TO FLEA
MARKET

GATE F
PEDESTRIAN
ENTRANCE
TO FLEA
MARKET

BUS TRANSPORTATION AREA

TRANSPORTATION
OFFICE

GATE D

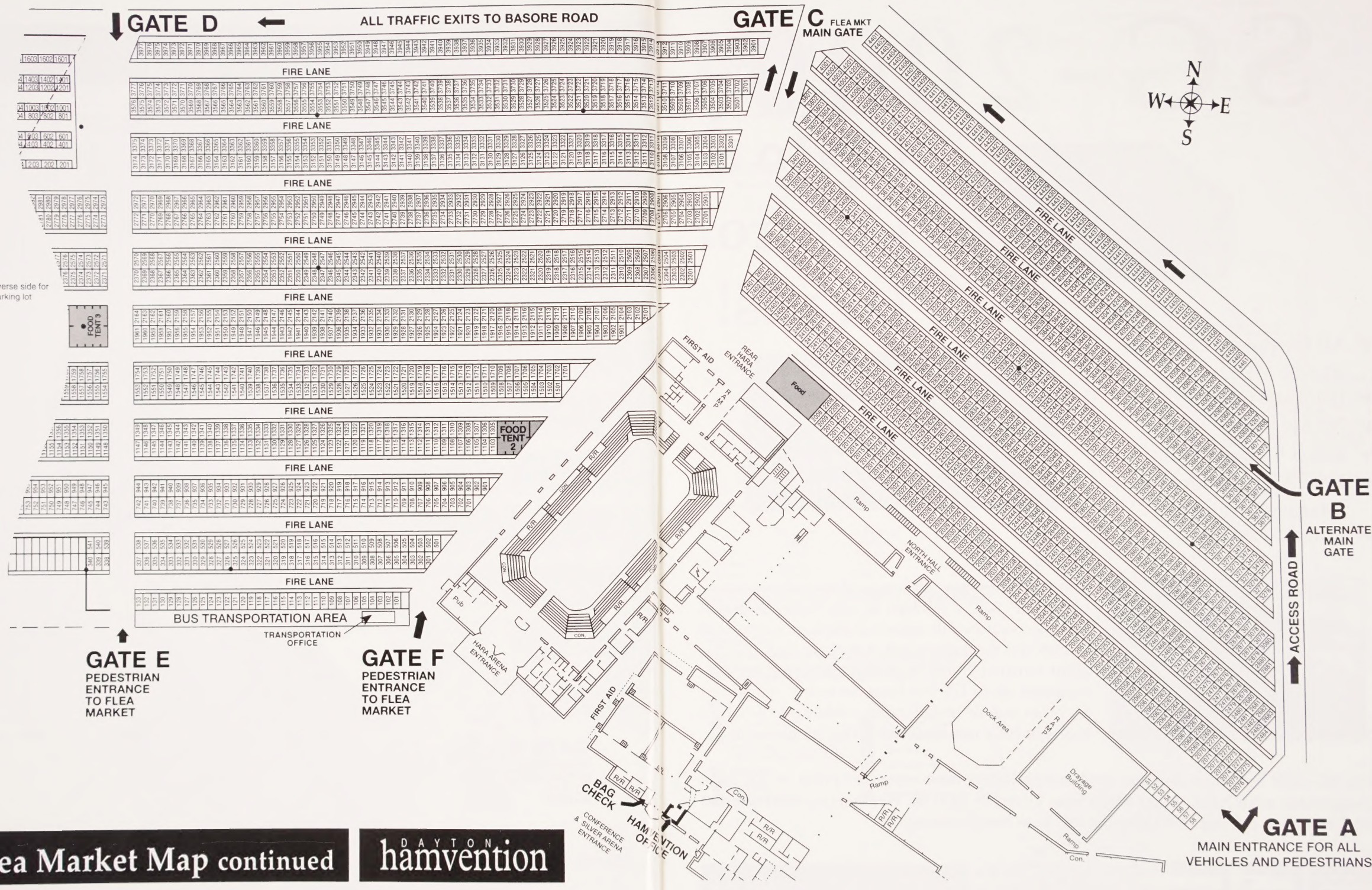
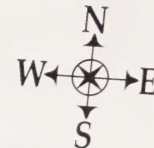
ALL TRAFFIC EXITS TO BASORE ROAD

GATE C

FLEA MKT
MAIN GATE

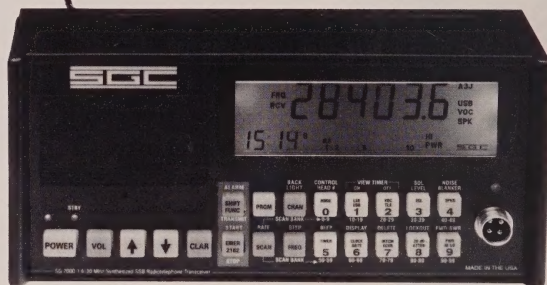
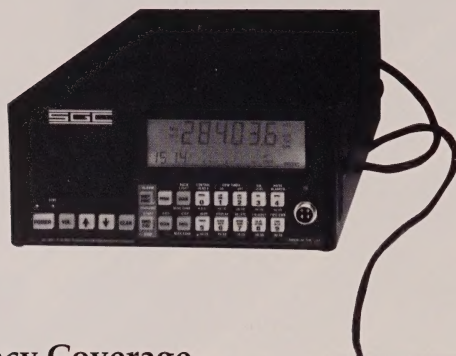
GATE B
ALTERNATE
MAIN GATE

GATE A
MAIN ENTRANCE FOR ALL
VEHICLES AND PEDESTRIANS

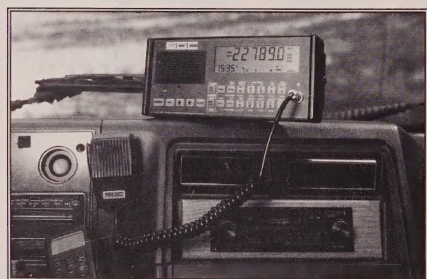


SG-2000

Up to 8 Control Heads!

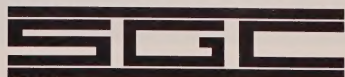


- ✓ All Frequency Coverage
(1.6-30 MHz)
- ✓ 150 Watts Output
- ✓ 744 Memories
- ✓ Direct Frequency Entry
- ✓ Type Approved for
Marine & Aviation
- ✓ American Made



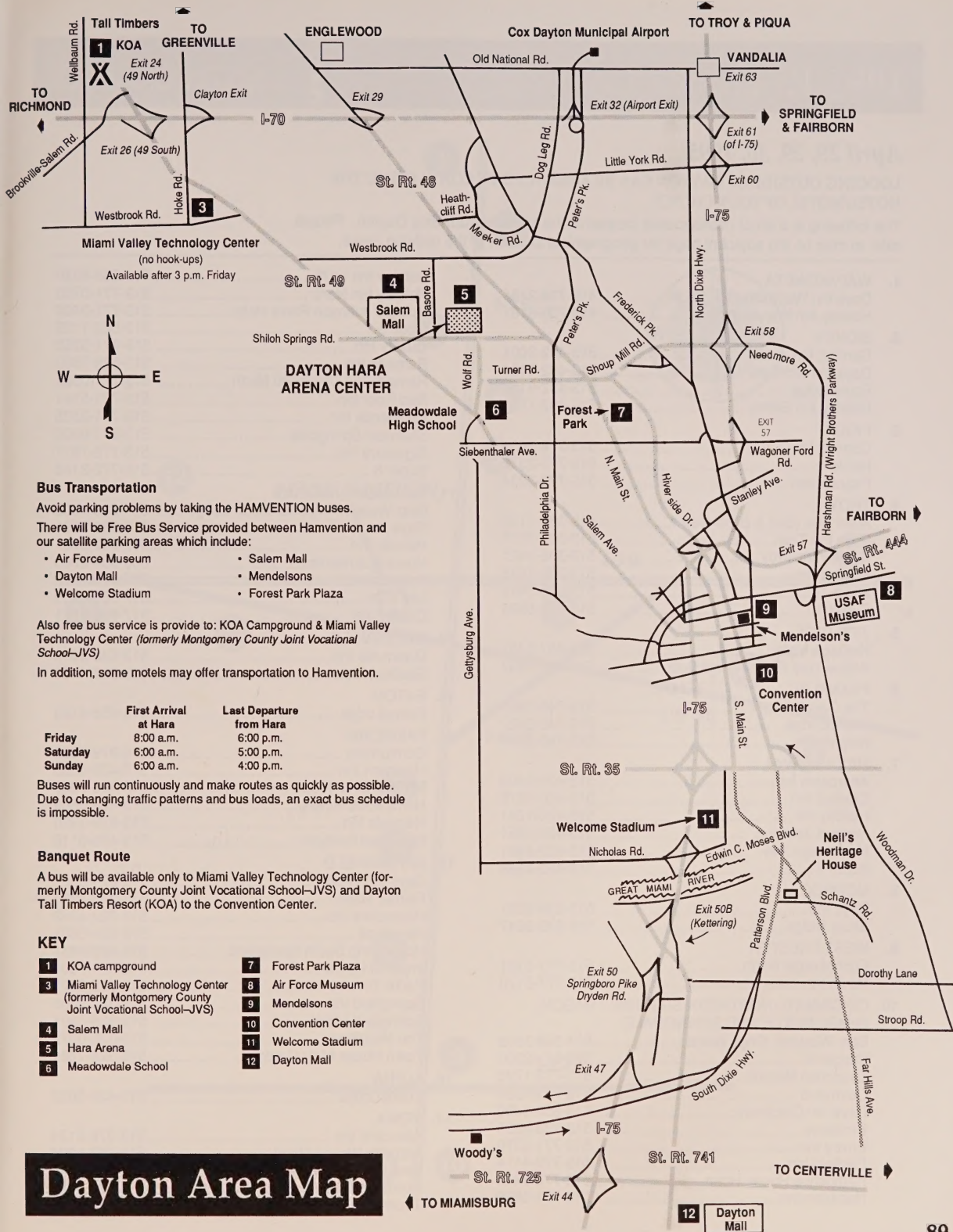
If you're planning ultra rugged mobile or marine use of HF, SGC's SG-2000 is your radio of choice! Serious operators will appreciate the large easy to read display and the positive feel of the keyboard. The SG-2000 control head is removable and may be mounted up to 175 feet from the radio. It's perfect for clean mobile installations. Add up to 8 control heads or fully remote the radio by telephone line.

The SG-2000 has more features and compatibility than any other radio in it's class: Compatible with ALE, AT&T High Seas Direct™, SITOR, Weatherfax, AMTOR and DSC selective calling. All this *plus* full ham band coverage!



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1995 Regional Lodging

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April 28, 29, 30, 1995

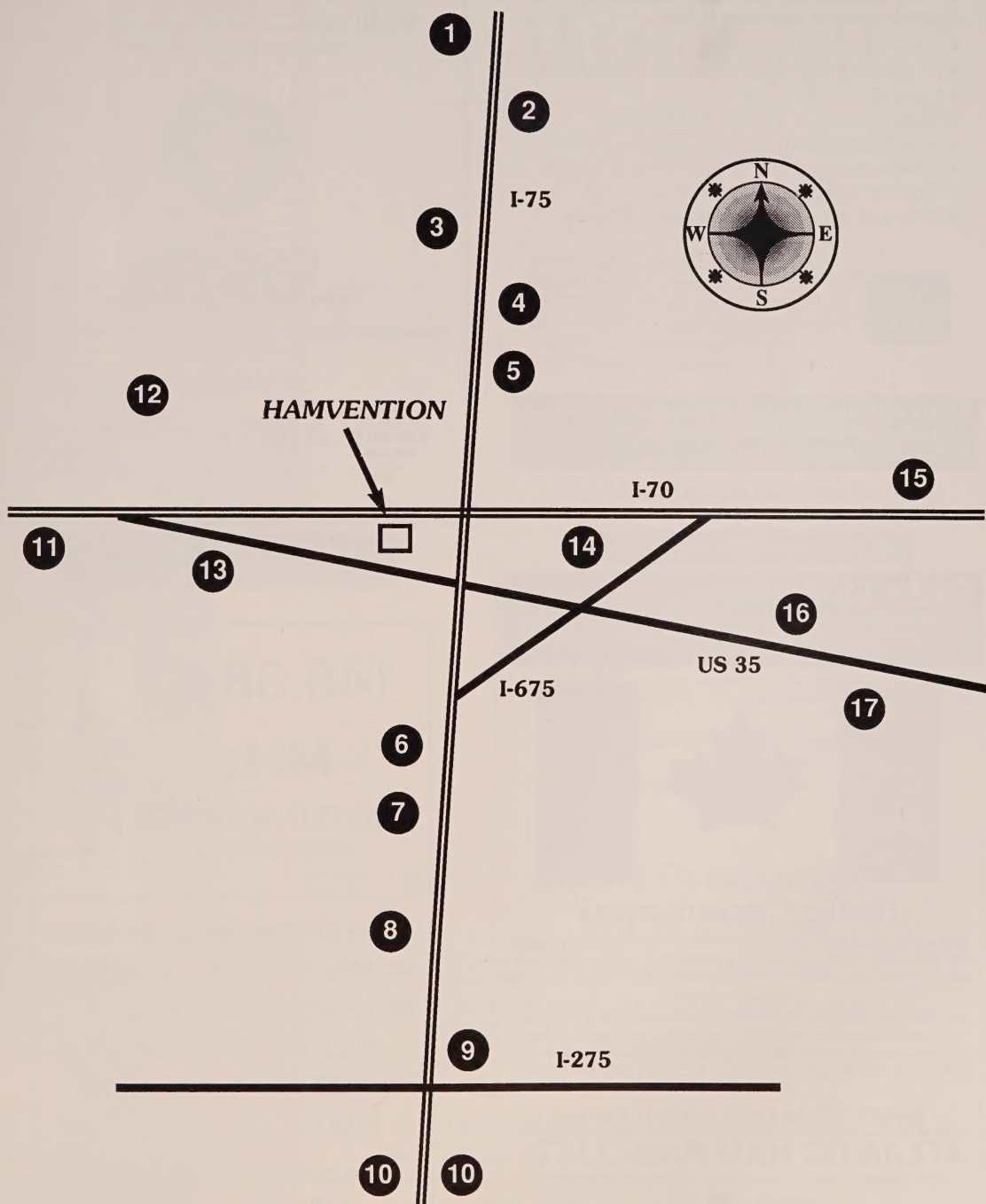
LODGING OUTSIDE OF DAYTON CAN BE ARRANGED BY CONTACTING THE HOTEL/MOTEL OF YOUR CHOICE.

The following is a list of hotels/motels located in the areas surrounding Dayton. Please refer to map on the adjacent page for geographical location of the outlying areas.

1. WAPAKONETA
 - Days Inn Wapakoneta..... 419-738-2184
 - Holiday Inn Wapakoneta..... 419-738-8181
2. SIDNEY
 - Comfort Inn 513-492-3001
 - Days Inn Sidney..... 513-492-1104
 - EconoLodge..... 513-492-9164
 - Holiday Inn Sidney..... 513-492-1131
3. PIQUA
 - Comfort Inn 513-778-3001
 - Ho-Jo 513-773-2314
 - Piqua Motel 513-773-3234
4. TROY
 - Allen Villa (Bed & Breakfast)..... 513-335-1181
 - Days Inn Troy..... 513-339-7571
 - Holiday Inn Troy..... 513-335-0021
 - Knights Inn..... 513-339-1515
 - Micro-Tel..... 513-335-0013
 - Super 8 513-339-6564
5. TIPP CITY
 - Heritage Motel..... 513-667-2481
 - Willow Tree (Bed & Breakfast)..... 513-667-2957
6. FRANKLIN
 - The Cavalier..... 513-746-3961
 - EconoLodge..... 513-746-3627
 - Knights Inn..... 513-746-2841
7. MIDDLETOWN
 - Affordable Inn..... 513-423-9403
 - Comfort Inn 513-420-9378
 - Holiday Inn..... 513-424-1201
 - Howard Johnson 513-424-3551
 - Manchester Inn 513-422-5481
 - Super 8 513-422-4888
8. MONROE
 - Days Inn..... 513-539-9221
 - Stony Ridge 513-539-9247
9. WEST CHESTER
 - EconoLodge North..... 513-777-5121
 - Ho Jo Inn..... 513-777-5170
10. CINCINNATI (NORTHERN SUBURBS / MASON, SHARONVILLE AND SPRINGDALE)
 - Best Western, Kings Island..... 513-398-3633
 - Budgetel..... 513-671-2300
 - Cincinnati Marriott..... 513-772-1720
 - Courtyard..... 513-733-4334
 - Days Inn Cincinnati..... 513-554-1400
 - Embassy..... 513-733-8900
 - Envoy Inn..... 513-771-0370
 - Fairfield Inn..... 513-772-4114
 - Hampshire House Hotel..... 513-772-5440
 - Hampton Inn 513-771-6888
 - Holiday Inn I-275..... 513-563-8330
 - Holiday Inn North 513-771-0700
 - Howard Johnson Plaza Hotel..... 513-771-3400
 - Motel 6..... 513-563-1123
 - Quality Inn..... 513-771-5252
 - Ramada Inn 513-829-7000
 - Ramada Inn Cincinnati North..... 513-771-0300
 - Red Roof Inn..... 513-771-5141
 - Residence Inn..... 513-771-2525
 - Sheraton Springdale..... 513-671-6600
 - Signature Inn..... 513-772-7877
 - Super 8 513-772-3140
11. RICHMOND, INDIANA
 - Best Western Imperial Motor Lodge 317-966-1505
 - Days Inn..... 317-966-7591
 - Holiday Inn..... 317-962-5551
 - Howard Johnson..... 800-654-2000
 - Knights Inn..... 317-966-6682
 - Lee's Inn..... 317-966-6559
 - Quality Inn..... 317-966-7511
12. GREENVILLE
 - Greenville Inn..... 513-548-3613
 - Stardust Motel..... 513-548-4154
13. EATON
 - EconoLodge..... 513-456-4183
14. FAIRBORN
 - Comfort Inn..... 513-879-7666
 - Hampton Inn..... 513-429-5505
 - Holiday Inn I-675..... 513-426-7800
 - Homewood Suites..... 513-429-0600
 - Ramada Inn 513-879-3920
 - Red Roof Fairborn..... 513-426-6116
15. SPRINGFIELD
 - Days Inn West..... 513-324-5561
 - Fairfax Motel..... 513-323-4915
 - Hampshire Inn..... 513-322-4942
 - Heartland 513-324-5601
 - Holiday Inn South Springfield..... 513-323-8631
 - Imperial House..... 513-324-5501
 - Parke Terrace 513-325-8721
 - Springfield Inn..... 513-322-3600
 - Springfield Motel..... 513-325-6991
 - The Meadows 513-323-0872
 - Town House Motor Lodge..... 513-325-7661
16. ALPHA
 - EconoLodge..... 513-426-5822
17. XENIA
 - Allendale Inn..... 513-376-8124
 - Anthony Wayne Motel..... 513-767-9004
 - Best Western/Regency Inn Motel 513-372-9954
 - Holiday Inn Xenia..... 513-372-9921
 - Tecumseh Motel 513-372-2512

Regional Lodging Map

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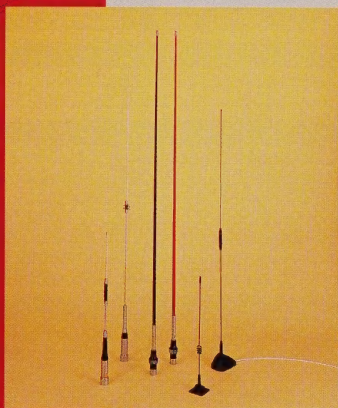


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Dayton Area Lodging

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DOWNTOWN (Section "I" on map)

Days Inn Dayton	330 W First St	Dayton, OH	45402	(513)223-7131	H M R L A P
Dayton Marriott	1414 S Patterson Blvd	Dayton, OH	45409	(513)223-1000	H M R L A P W
Price's Steamboat House B&B	6 Josie St	Dayton, OH	45403	(513)223-2444	M R A
Radisson Inn	11 S Ludlow St	Dayton, OH	45402	(513)461-4700	H M R L A W
Stouffer Center Plaza Hotel	E Fifth & S Jefferson St	Dayton, OH	45402	(513)224-0800	H M R L A P W

I-75 NORTHEAST (Section "II" on map)

Best Inn	5551 Springfield St	Dayton, OH	45431	(513)258-2233	H
Dayton Motor Hotel	639 Keowee St	Dayton, OH	45404	(513)222-5518	
Dayton Rodeway Inn	7575 Poe Ave	Dayton, OH	45414	(513)454-0550	H M L A
8 Inn of Dayton	1891 Harshman Rd	Dayton, OH	45424	(513)236-8083	
Holiday Inn North	2301 Wagoner Ford Rd	Dayton, OH	45414	(513)278-4871	H M R L P W
Plaza Motel	1728 Stanley Ave	Dayton, OH	45404	(513)224-1266	
Radisson Inn Dayton	2401 Needmore Rd	Dayton, OH	45414	(513)278-5711	H M R L A W
Residence Inn by Marriott	7070 Poe Ave	Dayton, OH	45414	(513)898-7764	H M P
Riverside Motel	5441 Springfield St	Dayton, OH	45431	(513)254-9700	M A
Royal Motel	1450 N Keowee St	Dayton, OH	45404	(513)224-9636	H A
Scottish Inns	845 E National Rd	Vandalia, OH	45377	(513)898-5871	H A
Travelers Motel North	2833 N. Dixie	Dayton, OH	45414	(513)277-6585	

I-70 EAST (Section "II" on map)

Super 8 Motel	8110 Old Troy Pk	Huber Heights, OH	45424	(513)237-1888	H
Travelodge Dayton	7911 Brandt Pk	Huber Heights, OH	45424	(513)236-9361	

I-75 SOUTHEAST (Section "III" on map)

Courtyard by Marriott	100 Prestige Place	Miamisburg, OH	45342	(513)433-3131	H M R L A P W
Guest Quarters Suite Hotel	300 Prestige Place	Miamisburg, OH	45342	(513)436-2400	H M R L P W
Holiday Inn Dayton Mall	31 Prestige Plaza	Miamisburg, OH	45342	(513)434-8030	H M R L P
Motel 6 South	8101 Springboro Pk	Miamisburg, OH	45342	(513)434-8750	H
Red Horse Motor Inn	4625 S Dixie Dr	Dayton, OH	45439	(513)294-7500	
Relax Inn	3333 S Dixie Dr	Dayton, OH	45439	(513)299-3581	H
Residence Inn Dayton South	155 Prestige Place	Miamisburg, OH	45342	(513)434-7881	H

I-675 SOUTHEAST (Section "III" on map)

Country Hearth Inn	1944 Miamisburg-Centerville Rd	Dayton, OH	45459	(513)435-1550	H M P
Hampton Inn South	8099 Old Yankee St	Dayton, OH	45458	(513)436-3700	H M P W

I-75 SOUTHWEST (Section "IV" on map)

Best Western Continental Inn	155 Monarch Ln	Miamisburg, OH	45342	(513)866-5500	H M R L
Comfort Inn	2140 S Edwin C Moses Blvd	Dayton, OH	45408	(513)223-0166	M L A
Holiday Inn South	2455 Dryden Rd	Moraine, OH	45439	(513)294-1471	H M R L P W
Ideal Motel	2450 Dryden Rd	Moraine, OH	45439	(513)298-0380	R L
Knights Inn Dayton South	185 Byers Rd	Miamisburg, OH	45342	(513)859-8797	M
Red Roof Inn Miamisburg	222 Byers Rd	Miamisburg, OH	45342	(513)866-0705	
Signature Inn Dayton South	250 Byers Rd	Miamisburg, OH	45342	(513)865-0077	H M

I-70 WEST (Section "V" on map)

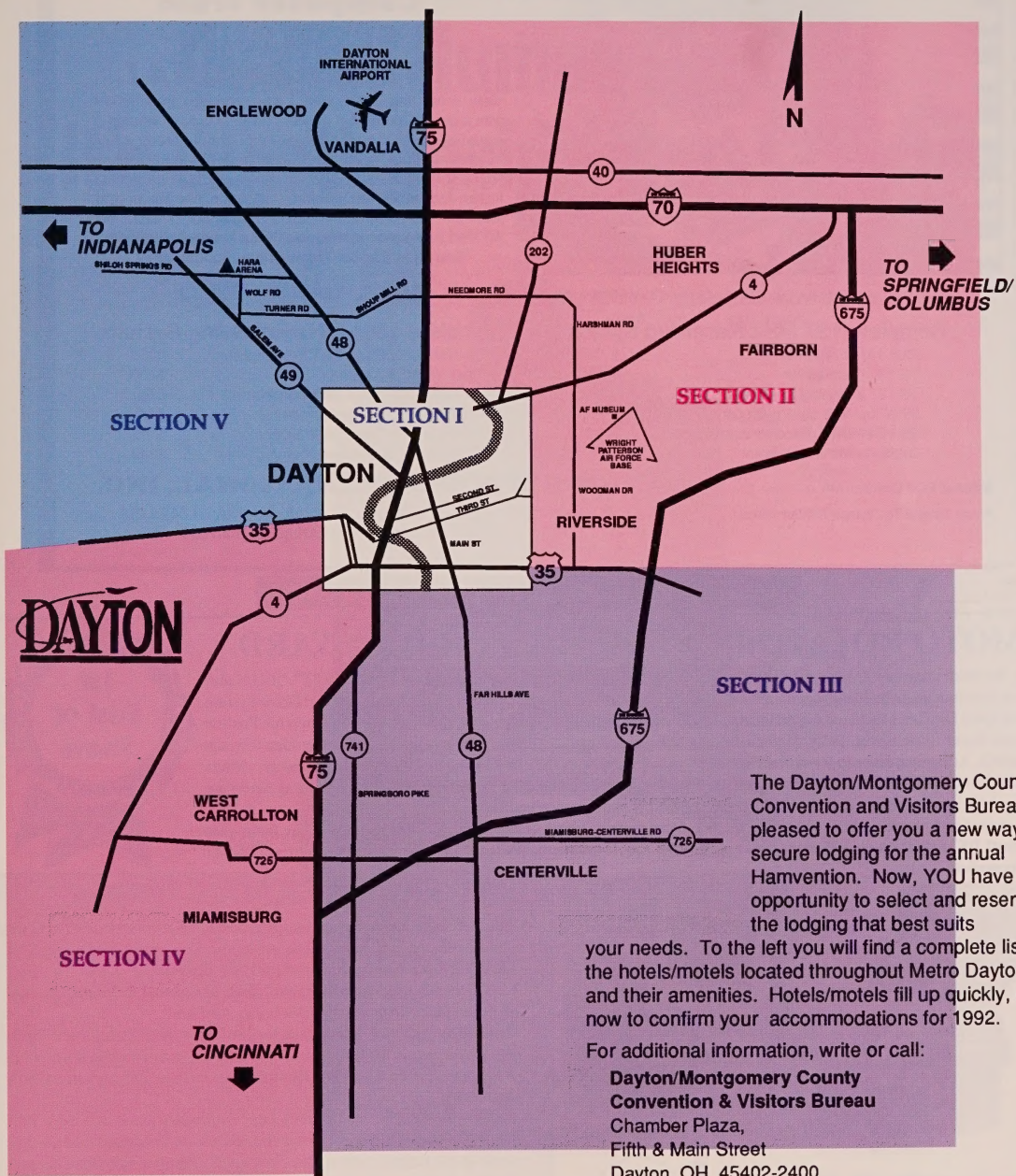
Cross Country Inn Englewood	9325 N Main St	Dayton, OH	45415	(513)836-8339	H P
Days Inn Dayton/Brookville	100 Parkview Dr	Brookville, OH	45309	(513)833-4003	H
Dayton Airport Inn	Dayton Int Airport	Vandalia, OH	45377	(513)898-1000	M R A P
Hampton Inn Northwest	20 Rodridge Rd	Englewood, OH	45322	(513)832-2222	H M A W
Holiday Inn Dayton Airport/NW	10 Rodridge Rd	Englewood, OH	45322	(513)832-1234	H M R L A P
Motel 6 Dayton Northwest	1212 S Main St	Englewood, OH	45322	(513)832-3770	H

I-75 NORTHWEST (Section "V" on map)

Best Western North Plaza Inn	3636 N Dixie Dr	Dayton, OH	45414	(513)276-6151	M R
Comfort Inn	7125 Miller Lane	Dayton, OH	45414	(513)890-9995	H P
Cross Country Inn Vandalia	550 E National Rd	Vandalia, OH	45377	(513)898-7636	H
Days Inn North	7470 Miller Lane	Dayton, OH	45414	(513)898-4946	P
Econolodge North	2221 Wagoner Ford Rd	Dayton, OH	45414	(513)278-1500	H A
Economy Inn	4101 Keats Rd	Dayton, OH	45414	(513)274-1116	H L
Fairfield Inn by Marriott	6960 Miller Lane	Dayton, OH	45414	(513)898-1120	H M
Hio Jo Inn	75 Corporate Center Dr	Vandalia, OH	45377	(513)898-8321	H M R L A
Knights Inn Dayton North	3663 Maxton Rd	Dayton, OH	45414	(513)898-1212	M
Motel 6 Dayton North	7130 Miller Lane	Dayton, OH	45414	(513)898-3606	H
Ramada Inn Dayton North	4079 Little York Rd	Dayton, OH	45414	(513)890-9500	H M R L A
Red Roof Inn Dayton North	7370 Miller Lane	Dayton, OH	45414	(513)898-1054	
35 West Motel	7040 W Third St	Dayton, OH	45427	(513)835-5965	

Area Lodging Map

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your needs. To the left you will find a complete list of the hotels/motels located throughout Metro Dayton and their amenities. Hotels/motels fill up quickly, act now to confirm your accommodations for 1992.

For additional information, write or call:

**Dayton/Montgomery County
Convention & Visitors Bureau**
Chamber Plaza,
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Dayton, OH 45402-2400
(513) 223-2612

LEGEND

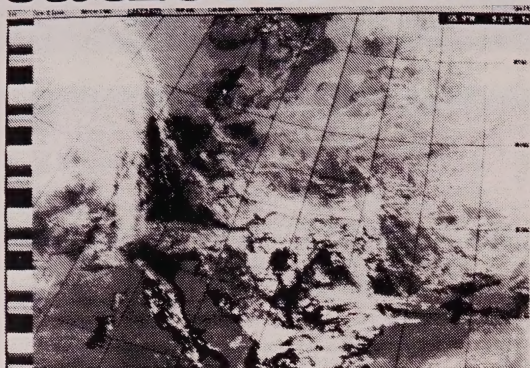
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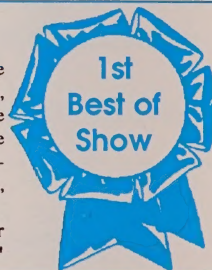
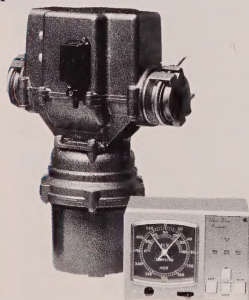
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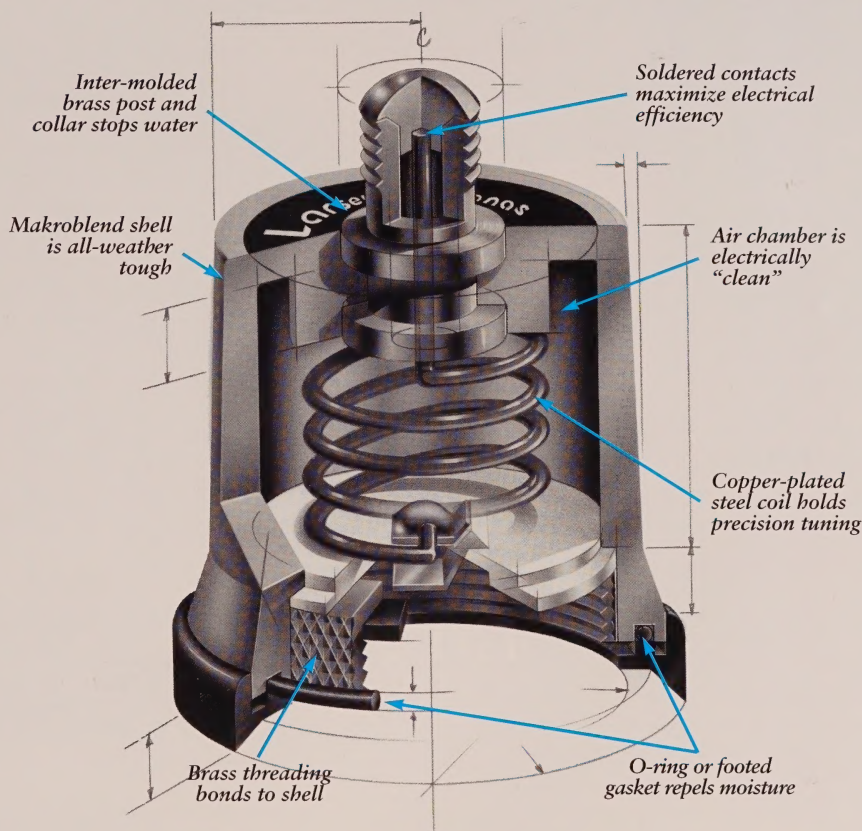
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Features

- Max. 50W output (144MHz), 35W (440MHz)
- "6-in-1" programmable memory
- 72 memory channels
- Time-Operated & Carrier-Operated scan stop modes
- Dual receive on same band (VHF+VHF or UHF+UHF)
- Built-in DTSS selective calling with page
- ASC (Auto Simplex Checker)
- Built-in CTCSS encoder & optional TSU-8 decoder
- Key function display ■ Automatic band change
- AIP (Advanced Intercept Point) ■ Cross-band repeater
- Selectable frequency step (5, 10, 12.5, 15, 20 or 25kHz)
- Wireless clone function ■ Incremental MHz key
- S-meter squelch
- Tone alert system with elapsed time indicator
- Separate speaker terminals for each band (switchable)
- Auto repeater offset (144MHz)
- Repeater reverse switch & offset switch
- 3-position RF output power control
- Dimmer control ■ Auto power-off

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Kenwood's new FM dual bander, the TM-733A (144MHz/440MHz), is specially tailored for hassle-free mobile communications with a unique "6-in-1" programmable memory. Six entire operating profiles—including everything from frequency range to dimmer level—can be stored, ready for instant recall. So there's virtually no need to adjust your settings. The detachable front panel has a high-visibility LCD with key function display to make on-the-move operation even easier. Of course, this compact transceiver has a full complement of sophisticated features, including 72 memory channels, DTSS selective calling and page functions, ASC (checks whether you can switch from a repeater to simplex communications), AIP (Kenwood's exclusive circuit for enhancing RX performance), and a jack for 1200/9600bps packet use. And as well as receiving simultaneously on VHF and UHF bands, the TM-733A can receive two frequencies on the same band (VHF+VHF or UHF+UHF). There's even an optional quick-release kit as an added anti-theft measure. So check out the TM-733A—a sensation bred from inspiration.

*This device has not been approved by the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained.

*An optional accessory kit is required to mount the front panel separately from the main unit.

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AMATEUR RADIO PRODUCTS GROUP
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NEW
TM-642A

TM-942A



TM-942A/742A/642A
FM MULTIBANDER

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Features

- Max. 50W output (144MHz), 25W (220MHz), 35W (440MHz), 10W (1200MHz)
- 101 memory channels & memory bank system
- Independent SQL & VOL controls for each band
- Automatic band change
- Built-in DTSS selective calling feature with page
- Selectable frequency step ■ 8 scan modes per band
- Time Operated & Carrier Operated scan stop modes
- Direct frequency entry with supplied microphone
- Tone alert with elapsed time indicator
- S-meter squelch, noise squelch & auto squelch
- Cross-band repeater ■ Muting for sub-band circuit
- Multiple lock functions ■ Wireless remote control function
- Built-in CTCSS encoder & optional TSU-7 decoder
- Date & time display, stopwatch, alarm & on/off timer
- 3-position RF output power control
- Auto power-off with warning beeper ■ Time-out timer
- Separate control & display units (optional cable kits)

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TECHNICIANS!



NEW
TS-60S:
Super Compact,
90W, 6 meter
Transceiver

TS-50S:
Super Compact
100W, HF
Transceiver



Features

- 100W (TS-50S), 90W (TS-60S) on SSB, CW, FM modes, 25W on AM mode
- 100 memory channels
- CTCSS encode built-in
- DDS (Direct Digital Synthesizer) with fuzzy logic control
- Large LCD panel with digital bar meter
- Auto-mode capability
- Menu system selects custom operating features
- AIP (Advanced Intercept Point) for increased receiver dynamic range
- Switchable AGC Circuit (SLOW/FAST)
- All-mode squelch
- CW reverse mode
- Full break-in and semi break-in
- 20dB attenuator
- Relay & ext. ALC terminals
- Multi-function microphone supplied
- Auto power off function
- 3-position RF output power control
- Optional 500Hz CW filter (YK-107C)
- Optional AT-50 external antenna tuner (TS-50S only)
- Optional computer interface (IF-100)

Meet the new set of twins from Kenwood -- The TS-60S all mode, 6 meter, 90W transceiver, and the TS-50S all band, 100W HF transceiver with general coverage receiver. Due to the amazing response to our super compact TS-50S transceiver, we have come up with a companion 6 meter transceiver in the same package, the TS-60S. Compact enough to mount in a vehicle or take into the field, both models provide desktop power and such sophisticated features as 100 memory channels, microprocessor controlled Direct Digital Synthesis (DDS) with innovative "fuzzy logic" control, and Kenwood's own AIP for superior dynamic range. There's also IF shift and CW reverse mode for interference reduction, TF-SET, and a noise blanker - plus everything you need for split - frequency operations. The menu function enables you to customize and select operating features to suit your individual needs.

TS-50S and TS-60S -- the new set of twins from Kenwood. Innovative, rugged, super compact - choose one for your shack, mobile, or portable operations today!



KENWOOD COMMUNICATIONS CORPORATION
AMATEUR RADIO PRODUCTS GROUP
P.O. BOX 22745 2201 East Dominguez St. Long Beach, CA 90801-5745
KENWOOD ELECTRONICS CANADA INC.
6070 Kestrel Road, Mississauga, Ontario L5B 1S8, Canada

KENWOOD

Kenwood's TM-251A/451A/551A Shift into Overdrive!



TM-251A

TM-251A/451A/551A FM MOBILE TRANSCEIVERS

When the going gets rough, Kenwood's mobile FM transceivers show their stuff. For a winning combination of performance and operating ease, nothing beats the TM-251A (144MHz), TM-451A (440MHz), and TM-551A (1200MHz). Despite being single-banders, they have a dual-band receive capability, allowing full-duplex cross-band communications using split-memory channels (TM-251A > TM-451A). Each transceiver is equipped with 41 memory channels (expandable to 200 with the ME-1 option), a digital recording system for messages (max. 16 secs), a dual-menu system, and a 6-pin mini DIN connector for 1200/9600bps packet communications. Built-in DTSS allows 3-digit DTMF selective calling access, and the page function alerts you to incoming calls. There's also a large multi-function LCD with 3 different display modes, as well as a multi-function microphone with 4 programmable keys and 16 DTMF keys. So if you want pole position, choose Kenwood.



TM-451A



TM-551A*

*This device has not been approved by the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained.

Features

- Max. 50W output (TM-251A), 35W (TM-451A), 10W (TM-551A)
- 41 memory channels (up to 200 with ME-1 option)
- Dual-menu system ■ DTSS with page ■ S-meter squelch
- Built-in digital recording system
- 6-pin mini DIN connector (1200/9600bps packet)
- Multi-function microphone with DTMF (supplied)
- Fuzzy logic control for tuning
- Selectable frequency step (5, 10, 12.5, 15, 20 or 25kHz)
- Channel number display ■ Auto-lock tuning (TM-551A)
- Band scan, program scan, memory scan, call scan
- Time Operated and Carrier Operated scan stop modes
- Cross-band repeater functions
 - TM-251A — TX: 144MHz band, RX: 440MHz band
 - TM-451A — TX: 440MHz band, RX: 144MHz band
- Auto repeater offset (TM-251A)
- 10 DTMF memory (15 digits)
- Built-in CTCSS encoder and optional TSU-8 decoder
- 5-step dimmer control
- 3-position RF output power control (TM-251A: 50W, 10W, 5W; TM-451A: 35W, 10W, 5W)
- Auto power-off (OFF, 60, 120, 180 min.) ■ Time-out timer (OFF, 3, 5, 10, 20, 30 min.) ■ Wireless clone function

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6070 Kestrel Road, Mississauga, Ontario L5T 1S8

KENWOOD

Travel Light



Features

- Frequency coverage: 144–148MHz (TM-255A), 430–440MHz (TM-455A)
- 101 memory channels
- Max. 40W output (TM-255A), 35W (TM-455A)
- DDS (Direct Digital Synthesizer) with fuzzy logic control
- Twin tuning dials ■ Dual-menu system
- Built-in DTSS with page ■ AIP (Advanced Intercept Point)
- IF-SHIFT (SSB, CW) ■ Pulse noise blanker
- Semi break-in ■ TF-SET
- Multi-function microphone with DTMF (supplied)
- Automatic mic gain control circuit
- Tone alert system with elapsed time indicator
- Built-in TCXO (temperature-compensated crystal oscillator)
- 6-pin mini DIN connector for 1200/9600 bps packet
- S-meter squelch ■ All mode squelch
- Built-in CTCSS encoder, with optional TSU-8 decoder
- Auto power-off ■ Time-out timer

TM-255A/455A ALL-MODE TRANSCEIVERS

1200/9600
bps
packet compatible

Get back. All-mode transceivers are on the move, with the launch of Kenwood's innovative new TM-255A (144MHz) and TM-455A (430MHz). Both models feature a detachable front panel—a world first in this category—for easy mounting in any vehicle. But whether mobile or stationary, you can count on peerless performance—in FM, SSB and CW modes. Because “compact” doesn’t mean “compromise”. Take for example the 101 memory channels—plus memory shift, memory scroll, and a full range of scan functions. Among the many other impressive features are built-in DTSS with page function, DDS with “fuzzy” control, a jack for 1200/9600bps packet communications, and comprehensive noise reduction measures—including Kenwood's exclusive AIP, IF-SHIFT and a noise blanker. Truly a powerful package, but surprisingly easy to operate, thanks to the DTMF microphone with programmable keys, dual-menu system, and twin tuning dials. All-mode versatility at its best. And Kenwood made it happen.

*An optional accessory kit is required to mount the front panel separately from the main unit.

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6070 Keele Road, Mississauga, Ontario L5T 1S8

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